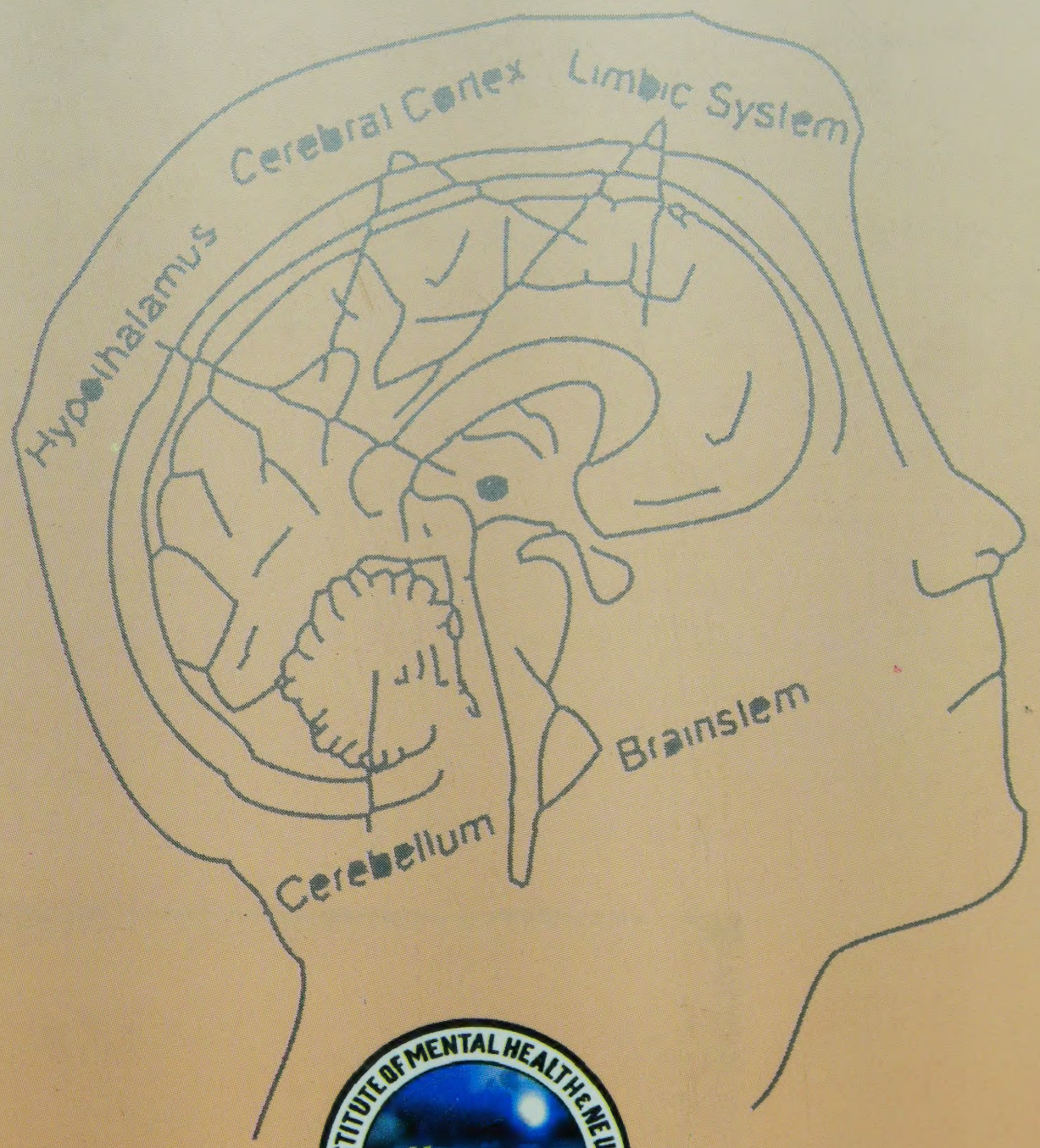
MENTAL HEALTH CARE BY PRIMARY CARE DOCTORS



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Prof. R.Srinivasa Murthy

Prof. Mohan.K.Isaac

Prof.C.R.Chandrashekar

Dr.K.V.Kishore Kumar

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Bangalore - 560 029, India

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Prof. R. SRINIVASA MURTHY

Prof. MOHAN K.ISAAC

Prof. C.R.CHANDRASHEKAR

Dr. K.V.KISHORE KUMAR

Department of Psychiatry

NATIONAL INSTITUTE OF MENTAL HEALTH AND NEURO SCIENCES (Deemed University)

BANGALORE - 560 029, INDIA

FOREWORD

Mental illness is an age-old problem of mankind. It is recorded in the oldest literatures of all cultures all over the world. Till recently, the exact causes of mental illnesses were not known and there were few effective treatment methods. Mental patients were often a source of disturbance to others. Initial efforts were to isolate them from others and keep them in closed places called 'asylums'. This did not solve the problem. When these patients had to live away from their family members and stay within the limits of the four walls of the mental hospitals, they deteriorated. Their suffering increased. This led to severe fear among people about 'Mental Hospitals'. The general public hesitated to bring their mentally ill relatives to those hospitals.

In India, most states have only one or two mental hospitals and people find it difficult to reach these centers. In the last 30 years, sufficient research has been carried out to understand the nature of mental illnesses and evolve effective treatment methods. Currently inexpensive and effective treatment methods like drugs are available. However, these facilities have not reached the patients who live in rural areas. Since majority of our population live in rural areas, large number of mental patients do not get the benefits of modern treatment.

At NIMHANS, Bangalore, during the last 10 years, efforts were directed to examine the feasibility of treating mental patients in their own houses. The results of these experiences have shown that most of these patients can be cared for in their homes, using a limited range of inexpensive drugs, family counseling and support. Trained doctors and paramedical personnel can effectively look after these patients and help them to recover early. This means that mental health care can be provided at primary health units and primary health centres. People can easily make use of them. This involves minimum expenditure and no social stigma.

In India, a National Mental Health Programme (NMHP) has been formulated. This programme aims to integrate mental health care into the existing general health care system. The NMHP was approved by the Central

Council of Health and Family Welfare in 1982. For the first time in the country in April 1982, Ministry of Health and Family Welfare of Karnataka State, started deputing doctors and health workers for in service training in mental health care at NIMHANS, Bangalore on a regular basis.

In the above approach, health workers would identify people with mental illnesses in their area, bring them to primary health centres for treatment and manage them in the community. Most of the patients need care over a long period of time. Health workers as they visit the homes to carry out different health programmes, follow up the mentally ill persons. They can educate people to increase the awareness about mental health and gradually remove their misconceptions and unscientific practices.

This manual describes how medical officers can implement this programme. I hope that this manual serves as a guide for them in this task, and result in better care for mentally ill in our country.

Dr. G. N. Narayana Reddy
Director
NIMHANS, Bangalore

September, 1985

PREFACE

The various general population surveys of mental illnesses carried out in different parts of India during the sixties and seventies, showed that these illnesses are as common in our country as it is elsewhere, are equally common in rural and urban areas. Simple inexpensive and effective treatment methods for many of these serious and disabling disorders are now available. In India, currently psychiatric care is provided mainly through custodial mental hospitals and general hospital psychiatric units, all of which are situated in the cities. It is estimated that these existing services presently cater to only about 10% of those requiring mental health care. There is an urgent need to develop and evaluate alternative approaches to mental health care delivery system which is feasible and relevant to the Indian situation.

The Department of Psychiatry at the National Institute of Mental Health and Neuro Sciences one of the oldest and largest in the country - took up the challenge of taking mental health services into the community as early as 1975. A specially designed and staffed 'Community Psychiatry Unit' was established under the leadership of Prof. R.L.Kapur in 1975. The main aim of the unit was to extend mental health services by integrating it with the existing system of primary health care. For this, the primary health care staff had to be trained in basic mental health care. More specifically, the task of the unit was to develop, carry out and evaluate suitable short-term training programmes in basic mental health care for different categories of health care personnel, so that after training, these personnel could provide mental health care in their respective areas of work.

A rural health-training centre was established at Sakalawara (Community Mental Health Centre of NIMHANS) near Bangalore. A service programme was developed. Feasibility exercises were carried out in more than 120 villages around Sakalawara. Based on these experiences, simple manuals of instructions and short training programmes for medical officers and multipurpose workers of PHCs were developed. Pilot training programmes were carried out and evaluation was done at Primary Health Centres at Malur, Kolar District, and Anekal, in Bangalore District, (Karnataka State). These pilot programmes helped the unit to crystallize the

educational objectives for the mental health training of PHC personnel and meaningfully rewrite the manuals of instructions in basic mental health care. The revised manuals were used for training 19 batches of multipurpose workers and medical officers of various PHCs of Gulbarga division (Karnataka state) who were deputed to the Sakalawara training centre for a two weeks training in mental health, from April 1982 to December 1983.

The experience of training 19 batches of PHC personnel and the feedback given by these trainees has resulted in the revision of the manuals. Regular reviews of the manuals by post-graduate trainees from various disciplines at NIMHANS posted to the Community Mental Health Unit and the Unit staff have resulted in the current form of the manual. This manual for **Medical Officers** in its present form, was rewritten by the authors, for publication and larger use. It is hoped that this manual will lead to the integration of mental health into general health care services, in various parts of the country.

Dr. S. M. Channabasavanna
Head, Department of Psychiatry
NIMHANS, Bangalore

September 1985

FOREWORD TO THE FIFTH EDITION

Mental health care has assumed tremendous importance for both developing and developed countries alike all over the world. Efforts to make mental health services available in the community have been an important agenda for both professional and the Government in the country for the last three and half decades. India has been a leader in the area of community based mental health delivery to ensure continuous mental health care at the level of primary health centers and sub centers. As part of this, NIMHANS and several other stake holders have been able to see the relevance of replicating Bellary Model of mental health care where integration of Mental Health Care occurred in the entire district. The experience gained from implementing mental health care in the entire district and taking the same to several more districts in the country has been one of the most positive developments in India in terms of mental health services for needy and the poor. Currently, 125 districts have DMHP's across all the States and Union Territories The number of DMHP's will be expanded incrementally in the 11th five year plan so much so that the entire country will be covered in terms of basic mental health care in the community.

To ensure availability of mental health care in primary care settings, the primary care doctors should be trained in mental health care since their undergraduate exposure to mental health knowledge and skills are inadequate. While we are working towards strengthening the undergraduate psychiatry on one hand, we are also working towards providing on job training to medical officers so that their knowledge about priority mental disorders increase resulting in delivery of basic essential mental health care in primary care settings. To fulfill the above need, a self-instructional manual has been developed and the current one is the fifth revision of that manual. The manual has been enriched by addition of pictures and incorporation of frequently asked questions at the end of each section.

I sincerely hope that implementation of DMHP in the 11th plan will be very effective since all the preparations required to take the program forward has been made so that the needy are helped appropriately.

Dr. D. Nagaraja
Director/Vice-Chancellor
NIMHANS, Bangalore-560 029

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- Dr. Badri V Karur, formerly District Mental Health Programme Officer, Bellary, Primary Health Care physicians of Bellary District. Currently, Deputy Director Mental Health, Governmental of Karnataka.

Table of Contents

1. Mental Health Care as part of General Health Care

INTRODUCTION

Health is wealth. All of us want to be healthy. However, mere absence of illness is not health. A healthy person has a sound body. Healthy individuals are happy and contented. They have the ability to face difficulties, losses and frustrations. They are capable of living in harmony with others. Not only they are happy but also are able to do their best to keep others happy. They see that others are not put into trouble because of them. They also have certain moral and spiritual values. Such persons who are physically, mentally, socially and spiritually well can be considered healthy.

People become physically ill due to many reasons. Under-nourishment, disease causing organisms invading the body, fluctuations in the environment, wear and tear of bodily organs, injury to the body, defective blood supply to specific organs of the body etc., can lead to illness. When an individual is ill, it is usual to consult the doctor and take treatment.

Like the body, the 'mind' too can become ill. The mentally ill person's sense of well being and emotional equilibrium are disturbed. Various mental functions like thinking, emotions, memory, intelligence, judgment etc., can get disturbed. Talk and behaviors can become abnormal. As a result, the ability to work satisfactorily, and cope with and manage social and familial responsibilities can be impaired.

It is easy to share the experience of having difficulties due to damage or dysfunction to any part of the body. For e.g., all of us know what it is to have high fever, blindness or broken leg. In general, most people sympathize with a person who is physically ill or disabled. However, most of us do not understand what it is to be mentally ill. We often fail to sympathize with a mentally disabled person. We often neglect such individuals. When a person becomes mentally ill, such a person is usually not taken to a hospital immediately for proper treatment because of supernatural beliefs and misconceptions. To add to the problem, currently most of the mental health care facilities are available only in cities and towns.

As a primary health care doctor, you are already aware of the **'National Rural Health Mission,** which is one of the most significant health policy initiative in Independent India. It was launched in April 2005 and has been extended to cover all the states in the country. The NRHM's key goal is improve the access and availability of quality health care for people particularly the poor, people living in rural areas, women and children.

Therefore, the medical officers, multipurpose workers, other health staff and the ASHA workers have the primary responsibility of delivering basic mental health care to the community along with general health care as the most important step for extending mental health care to the individuals in the community.

MAGNITUDE OF MENTAL ILLNESS AND MENTAL HEALTH FACILITIES IN OUR COUNTRY

House to house surveys to estimate the number of mentally ill in a given community, have been conducted in our country as elsewhere in the world. According to World Health Organisation figures, in any country including ours, **one per cent** of the population suffers from severely incapacitating mental disorders and **ten per cent** of the population has lifetime risk of developing severe mental disorders. Depression is a very common psychiatric disorder and affects 3 percent of the population. Similarly, substance abuse is a major problem and approximately 3-5% of the population is addicted to various substances and alcohol is the commonest of them. One per cent of the population is affected by epilepsy and mental retardation respectively. Studies have also reported that one in every four patients attending primary care clinics have diagnosable mental disorders (commonly neurotic disorders). If we project these figures in our country, a significant proportion of the population needs mental health care and nearly 11 million of them are affected by severe mentally illness needing urgent mental health care. Ten times this number is likely to be affected by episodes of severe mental illness over their life time and these persons also need urgent care.

India is a land of villages and majority of the population live in rural areas. It goes without saying that majority of the mentally ill people live in

rural locations. As mentioned earlier, one out of every four patients seeking medical help in primary care settings have diagnosable mental disorders and the primary care doctors or physicians or other medical professionals do not detect most of these disorders. Most of these patients are not aware of the emotional nature of the illness. They think and believe that they have some physical illness. They take various drugs and treatment methods to get relief, often in vain.

While there are millions of people suffering from various types of mental illness, the mental health care facilities available for them are very meager. There are only **40 (37 old +3 new) mental hospitals** in the country with about **20,000 beds.** Chronic patients occupy more than 50% beds. The number of mental health professionals in the country is far too inadequate to meet the needs of people with mental health problems (3000 psychiatrists, and an equal number of clinical psychologists and social workers and a small number of psychiatric nurses for a population of more than one billion). In the state of Karnataka, there are two mental health institutions one in **Bangalore** with 630 beds, and the other in **Dharwad** with 300 beds. The number of mental health specialists, also is less. There are only about two to three psychiatrists for one million population whereas in developed countries there are 50-150 psychiatrists for every million population. Recently, psychiatric units have been established in medical college hospitals and general hospitals in various parts of the country. But it is very important to recognize that most of these facilities are inadequate, largely based in cities and have no access to people in rural India.

All MENTAL HEALTH FACILITIES ARE IN URBAN AREAS

Mental health facilities are firstly, inadequate and disproportionate to the need. The limited facilities available are used adequately for various reasons. It is estimated that less than **twenty percent** of patients who need help, take modern treatment. In comparison to developed nations, the treatment gap for mental disorders is much higher in India. Majority of the patients remain without getting medical help because of ignorance, fear, stigma, misconceptions and faulty attitudes regarding mental illness, their causes and treatment. General public often consider that mental illnesses are caused by evil spirits, black magic, witchcraft, bad stars and bad deeds

in the present or past life. Therefore, ill persons seek the help of **faith healers, (mantravadis)** and magicians who perform puja, counter-magic, exorcism, or offer prayers to Gods and give native/herbal medicines. Most often, they do not know that modern doctors can treat mental illness similar to the treatment of physical illness.

People have their **own fears** about mental hospitals. It is often felt that mental hospital is a place where dangerous mental patients are locked up. Families feel uncomfortable to admit their relatives in such settings. A patient treated in a mental hospital is stigmatized, socially isolated and marginalized in the community and so are his/her family members. Therefore, families do not seek treatment from mental hospitals and even if they do so, it is a last resort. Delays in treatment increase disability, family burden, and stigma and decrease the chances of recovery. Current evidence suggests that 70% patients with severe mental illness recover irrespective of the severity of illness in less than 3 months.

Distance: There are only one to two mental hospitals in most states, which often are very far away from majority of the needy persons and their families. Distance is an important factor for underutilization of services. Longer the distance less is the utilization of service.

Poverty and lack of social welfare support: In our country large numbers are poor and do not have money or other help to take the patient to the hospital or buy medicines for regular and complete treatment.

Long duration of treatment and follow up: Some patients need medications for a long time. This is especially true for those who are ill for long periods and those not receiving care early in the illness. They have to consult the doctor periodically. For example, persons with psychotic illness need regular treatment for varying periods of time **from few months to many years;** similarly, epileptic patients need drugs for **2 years** from the last attack. Most rural patients find it difficult to come even for the first consultation and treatment. They often become irregular and even stop the follow up visits to the hospital. They seek help again when there is a relapse. They often lose faith in hospital treatment and become victims of quacks who claim instantaneous, quick relief or cure with their treatment. When patients do not improve, the attempts to treat the ill persons are given up with

frustration and helplessness. These failed attempts also contribute to the myth that mental disorders are untreatable.

BASIC MENTAL HEALTH CARE PROGRAMMES IN INDIA-HOW AND WHERE IT WAS DEVLOPED IN THE COUNTRY

The initial experiments in organizing basic mental health care programs were at Chandigarh and Bangalore. Both these centers aimed to integrate mental health care at primary health care level.

The **Chandigarh program, carried** out at the Raipur Rani Block of Ambala District of Haryana state (1975-1982) , was part of a WHO project titled 'Strategies for extending mental health care'. Efforts were directed to develop a system of priority selection to train the existing primary health care personnel to carry out basic mental care tasks and to involve the community through public education and formation of Mental Health Association. 60,000 population of PHC block was selected for work. Over the course of 6 years, the levels and limits for mental health care work at primary health care level were outlined. The results demonstrated that there are significant number of mentally ill living in the rural areas needing urgent treatment and they were not receiving any help. Further, it was demonstrated that it was possible for the different categories of primary health personnel to carry out a limited range of mental health activities with the support of the medical officers. It was also shown that it was possible to involve the community in a meaningful manner. This experience resulted in a practical Manual of Mental Disorders and mental health education materials. A simultaneous project was carried out at **Bangalore** by the Community Psychiatry unit of Department of Psychiatry, National Institute of Mental Health and Neuro Sciences (NIMHANS) from 1975. In a series of planned studies and training programmes it was noted that it was possible to define clear tasks for doctors and health workers working in the PHC system and provide training to them. Separate manuals for the multipurpose workers (MPWs) in Kannada and the medical officers in English were developed based on the experience of the many years of fieldwork. Majority of the above rural mental health programmes were carried out from the Sakalawara Centre in Anekal Taluk. In addition, the Solur PHC set up was also involved in the application of the

knowledge gained. These experiences have shown the urgent need for taking mental health care to villages and the vital role the multipurpose workers and medical officers can play in providing basic mental health care.

Both these projects used relatively inexpensive and a limited range of medicines for treatment. The range of drugs needed were, chlorpromazine, fluphenazine, imipramine, diazepam, trihexyphenidyl, phenobarbitone and diphenyl hydantoin.

TRAINING FOR DOCTORS AND MPWs IN KARNATAKA STATE

A positive development in the State of Karnataka has been the initiation of regular monthly training courses for medical officers and MPWs at NIMHANS, Bangalore, since April 1982. The training program was for two week's duration and residential in nature. During the training, with the help of classroom teaching, fieldwork, clinical demonstrations and manuals, the basic mental health knowledge and skills are provided. One-week program for MPW's and two weeks program for doctors was organized **every month from April 1982 to December 1990 at NIMHANS.**

In July 1985, an initiative to cover a whole district (Bellary) of Karnataka was taken up by the joint collaboration of Department of Health and Family Welfare, Karnataka, NIMHANS and the district authorities of Bellary. The essentials of the District Mental Health Program (DMHP) were (i) identification of priority mental health problems for mental health care, (ii) training to all health personnel, (iii) provision of essential drugs and records, (iv) public education, (v) involvement of community and (v) regular monitoring of the program. The results of the five years have been positive. This has resulted in Karnataka State extending a similar program to 6 other districts.

Besides Chandigarh and Bangalore, other psychiatric centres taking up similar rural mental health programmes are Baroda, Calcutta, Delhi, Hyderabad, Jaipur, Lucknow, Patiala and Vellore. Some of the states like Haryana, Himachal Pradesh, Punjab, Pondicherry, Uttar Pradesh, Maharashtra, Gujarat, Kerala, Rajasthan, Andhra Pradesh, Assam, and West Bengal initiated pilot programmes from October 1985.

NATIONAL MENTAL HEALTH PROGRAM FOR INDIA (1982)

Following the experiences of different centres in providing community care for the mentally ill, the professionals and planners formulated a program for mental health care at the National Level in 1982.

The objectives of the program are:

(i) To ensure availability and accessibility of minimum health care for all in the foreseeable future, particularly to the most vulnerable and underprivileged.

(ii) To encourage application of mental health knowledge in general health care and in social development.

(iii) To provide community participation in the mental health service development and to stimulate efforts towards self-help in the community.

The **Central Council of Health and Family Welfare** in its meeting held from 18-20, August 1982 recommended that: (1) Mental health must form an integral part of the total health program and as such should be included in all National policies and programmes in the field of health education and social welfare; (ii) realizing the importance of mental health in the course curricula for various levels of health professionals, suitable actions should be taken in consultation with the appropriate authorities to strength the mental health education components. **This planned approach is to integrate mental health services with existing general health services.**

In this introduction, we have considered the current state of mental health services in the country, as well as the current approaches to the provision of basic mental health care. At present we have a practical and an appropriate approach to provide the needed services. What is needed is its applications through professional commitment to strengthen this area of work and the political and administrative support along with public involvement to make it a reality. Such a joint effort can result in meaningful basic mental care for most of the population, with minimum inputs and within a reasonable period of time.

DISTRICT MENTAL HEALTH PROGRAMMME (DMHP)

The Government of India has launched a scheme of DMHP under the NMHP-1996. This involves assisting the State Governments to implement the DMHP programme in one district. A sum of Rs 28.5 lakhs is given to each state for a period of 5 years. The objectives are as follows

1. To provide sustainable basic mental health care services in the community by integrating mental health into general health care services in primary care settings.
2. Early identification and treatment of persons with mental disorders in the community.
3. To see that patients and their relatives do not have to travel long distances to go to the hospitals or nursing homes in the cities.
4. To take pressure off the mental hospitals.
5. To reduce the stigma attached towards mental illness through change of attitude and public education.
6. To treat and rehabilitate mental patients discharged from the mental hospital within the community.

Components of District Mental Health Program.

1. Personnel-Program officers, psychologists, social workers, office assistant clerks and nurses
2. Equipments – Out sourced vehicle and other infrastructure
3. Medicines, POL and other contingencies etc.
4. IEC components in print and electronic media
5. Health Melas
6. Training programmes in identified institutions of various workers up to the grass root level doctors, health workers, nurses, social workers, clinical psychologists, non professionals like panchayat leaders, ANM teachers and anganawadi workers.

7. Development of training capsules for various workers and their translation in regional languages for use. Already some work has been done in this direction by NIMHANS, Bangalore and CIP, Ranchi.

At the end of 2008, 125 districts in all the states and union territories are having DMHP programmes and 100 districts are expected to add every year as part of the 11th five-year plan. It is envisaged that all the districts will have DMHP's in the country by the end of the 11th five-year plan. At the end of five years of DMHP, the State governments are expected to continue with their own resources.

Highlights

- **Mentally ill people were treated in mental hospital for centuries.**
- **Treating mentally ill person in the hospital is very expensive and reintegration of recovered persons becomes difficult.**
- **Treating mentally ill in the community is economical and reintegration becomes much easier.**
- **Mental health care in India has been largely community based.**
- **Feasibility of mental health care in the community has been demonstrated in Sakalawara, Bangalore, and Raipur Rani, Chandigarh. Similar experiences were reported from other parts of the country, subsequently.**
- **These experiences have resulted in formulation of National Mental Health Program in 1982.**
- **Mental disorders are disabling and burdensome. Their magnitude is high and it is considered a public health problem.**
- **Mental health care needs of the community can be met using public health approach.**
- **Public health approach to mental health care is economical, reduces treatment gap, disability and burden on the family.**

- **Early intervention results in faster recovery, better quality of life for the person, reduction in stigma and discrimination and better integration in to the community.**
- **In 1985 there was one DMHP program, were as in 2008, there are 125 DMHP programs.**

Commonly asked questions by the doctors

1. **Will the essential drugs be available in the PHC?**
   All the essential drugs should be available in the PHC very soon. Reliable information from the department of Health and Family Welfare is that all the essential drugs are available and they have been lifted to various districts. If there are any problems with respect to availability of drugs kindly write to the Commissioner of Health or Director of Health or other district officers like the DHO or district mental health program officer. This answer is for Doctors working in the State of Karnataka.

   For doctors working in other States in the country, this answer is not relevant. All the essential drugs for mental health care will be available as part of DMHP only. The mental health program officer and the local district health officers will be responsible for distribution of drugs. The drug distribution will occur like that of any other health program in the Department of Health and Family Welfare of the respective state.

2. **Since many patients go directly to the psychiatrists for consultation, it is important to write a referral letter to the medical officers of the respective primary health care facilities so that these patients are taken care off by the PHC team.**
   It is important for the all the specialists to keep the medical officer in the loop of care. This is important because the patient should be monitored on a regular basis. This also empowers the local doctor to handle mental health problems and understand that persons with mental health problems are not different from other physically ill persons. It is common practice for psychiatrists to write referral letter to concerned

primary care physician and encourage him/her to provide follow up care and encourage them to discuss with the specialist if there are any problems and seek clarification from time to time. This kind of an arrangement may not be common in private practice.

3. **There are many psychotic and depressed patients in the catchment area based on the prevalence data. However, till today not even single patient is taking proper treatment for mental health problems. More over, we don't have psychiatrists at taluk or the district levels. What is the role of faith healers for such patients?**

   As mentioned earlier, traditional or faith or religious healers have no role what-so-ever in the management of psychotic patients. However, emotionally distressed individuals can benefit from them to some extent. Since a large number of ill persons do not avail treatment as early as possible, they continue to have symptoms. This training program has been organized to address this need. We all hope that each one of you will use your skills to treat patients in your PHC area and help the ill to lead a productive life.

4. **Many of the mentally ill patients are taken to the Dargah with the belief that people influenced by ghosts, devils and black magic will get cured of their illnesses if they visit that place. In this space age, instead of educating people that the psychiatric problems can be cured in the hospital they are telling the people that it can be cured in the Dargahs and that too they are telling by means of mass media communication. Is this not a crime? If not, "Can psychiatric problems be solved in the Dargahs".**

   This is a relevant question. Your thoughts about this issue is well taken. Yes, the media should focus on scientific methods of treatment available at the present time and the benefits of such care for the ill person. I am sure you will agree with me that lack of care is the most important reason for family members to seek such a care. The demand on such facilities will gradually come down once mentally ill persons are treated in your PHC. Please make a note that word of mouth is the most important source of referral in our community. Once the treated patient gets better

her/his family members will start referring patients to you in large numbers.

5. Elaborate about healthy life style in principles of mental health.

Behavior is being recognized as being central to development of disease. This leads to disability, burden and premature death. Therefore, all the three aspects have economic implications on the person, his family, community and the nation. Changes in life style are very important for prevention of disease and promotion of health.

The following are very simple and useful strategies:

(a) Sleep–Rest regularly

(b) Relax–Practice simple breathing exercises every day for 15 -30 mts at a time , two to three times a day.

(c) Diet – do not fast or feast , eat sensibly

(d) Physical activity–walking , cycling or jogging for 45 mts a day five days a week.

(e) Stress – Identify the source of stress in your life and try to do something about it.

(f) Pleasure – Participate in pleasurable activities every day

(g) Interest – Develop interest beyond your work.

(h) Needs – Decrease your needs

(i) Share – Learn to share your difficulties with others.

All these seem simple and potentially doable but remember it needs three C's.

(**Conviction –** I need to make changes for my well-being; **Commitment** – Commit for the cause of your well being ; **Consistency**- Practicing it every day) If you are able to incorporate these as part of your life – **Changes** (health and well being) is not far away from you.

6. **Classify mental disorder**

A simple classification for use in primary care is as follows:

1. Psychosis – Organic psychosis (acute and chronic)
   Functional psychosis (acute and chronic)
2. Depression
3. Neurosis
4. Drug and substance abuse
5. Mental retardation
6. Childhood mental health problems.

7. **Classify drugs in treatment of psychiatric problems.**
   1. Anti-psychotics (chlorpromazine , haloperidol and resperidone)
   2. Anti-depressants (imipramine, amitryptaline and fluoxetine)
   3. Anti-anxiety drugs (diazepam , lorazepam, clonazepam and alprozolam).

8. **All the PHC's and general hospitals are provided with plenty of diazepam. Since lorazepam is a better medication, will the mental health authorities recommend to the government to supply lorazepam in place of diazepam?**

Lorazepam is a short acting benzodiazepine while diazepam is long acting. In general use, benzodiazepines should be for a short period of time failing which addiction can be a new problem that can come after intervention. I do not know whether the authorities will listen to us and make changes in the rate contract. Let us concentrate on what we can do, do not be liberal in prescribing benzodiazepines to patients. It is better to caution them about the addictive potential. Practice of relaxation can be a very good anti-anxiety intervention. Consider teaching this to all your patients.

9. **Are the drug related side effects intractable? If so, what are the precautions one should take to prevent it?**

No drug related side effect is intractable if recognized early. It is important to follow up patients regularly to identify side effects and initiate appropriate action.

10. **NIMHANS psychiatrists should recommend to government to introduce compulsory "yoga classes" for all higher primary and secondary schools in addition to adolescent development and sex education to reduce psychiatric cases in general.**
NIMHANS has initiated life skills education to promote health in schools. Yoga alone may not be helpful for adolescent development, but generic life skills can be very valuable.

11. **Can one develop mental health problem due to irregular practice of yoga?**
Irregularity in yoga has nothing to do with development of mental health problems.

12. **Please give the details of the mental health programs arranged at PHC level.**
Mental health is an integral part of total health. The DMHP envisages care for persons with mental health in your catchment area. As part of this doctors, health workers will provide training in essential mental care. Drugs will be provided for the same. The DHO and the District mental health program officer on a monthly basis will monitor this program. The District mental health program officer, on a regular basis, will provide support to doctors. This involves clarification about diagnosis, treatment and other support.

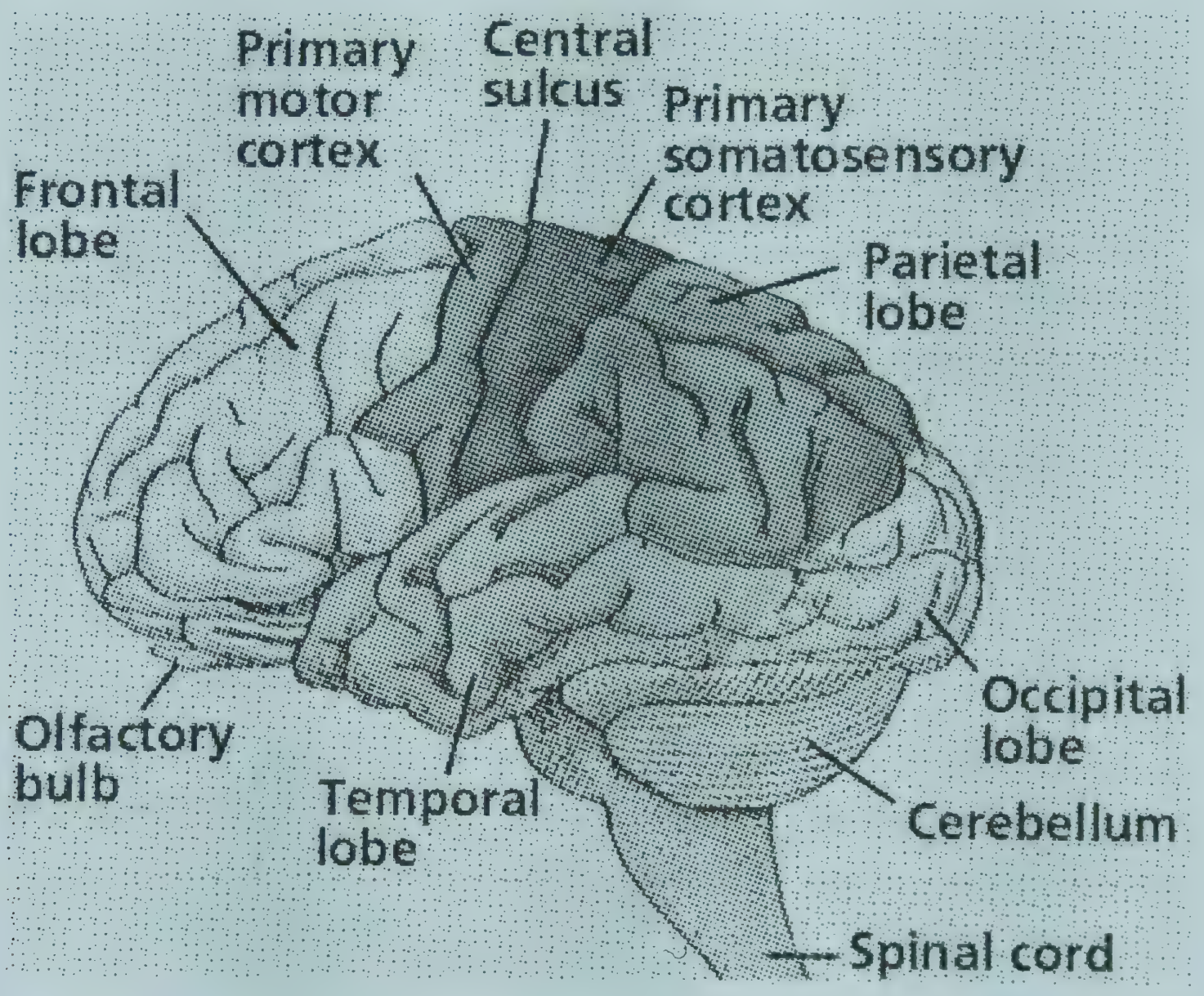
13. **Can you please tell us how to start the mental heath program in the community?**
District Mental Health Care program means provision of essential mental health care to ill persons living in respective catchment areas of the primary health center. It is important for the doctor to sensitize all the key persons in the area about mental health care. He should encourage the health workers and health inspectors to identify cases and refer them to the hospital for evaluation and treatment. The doctor should conduct classes for the health workers periodically in the PHC.This will motivate them to identify cases. Treated mentally ill persons are proof that mentally ill persons can be treated and a large number of families will call upon the doctor for help.

2. Brain and Behavior

INTRODUCTION

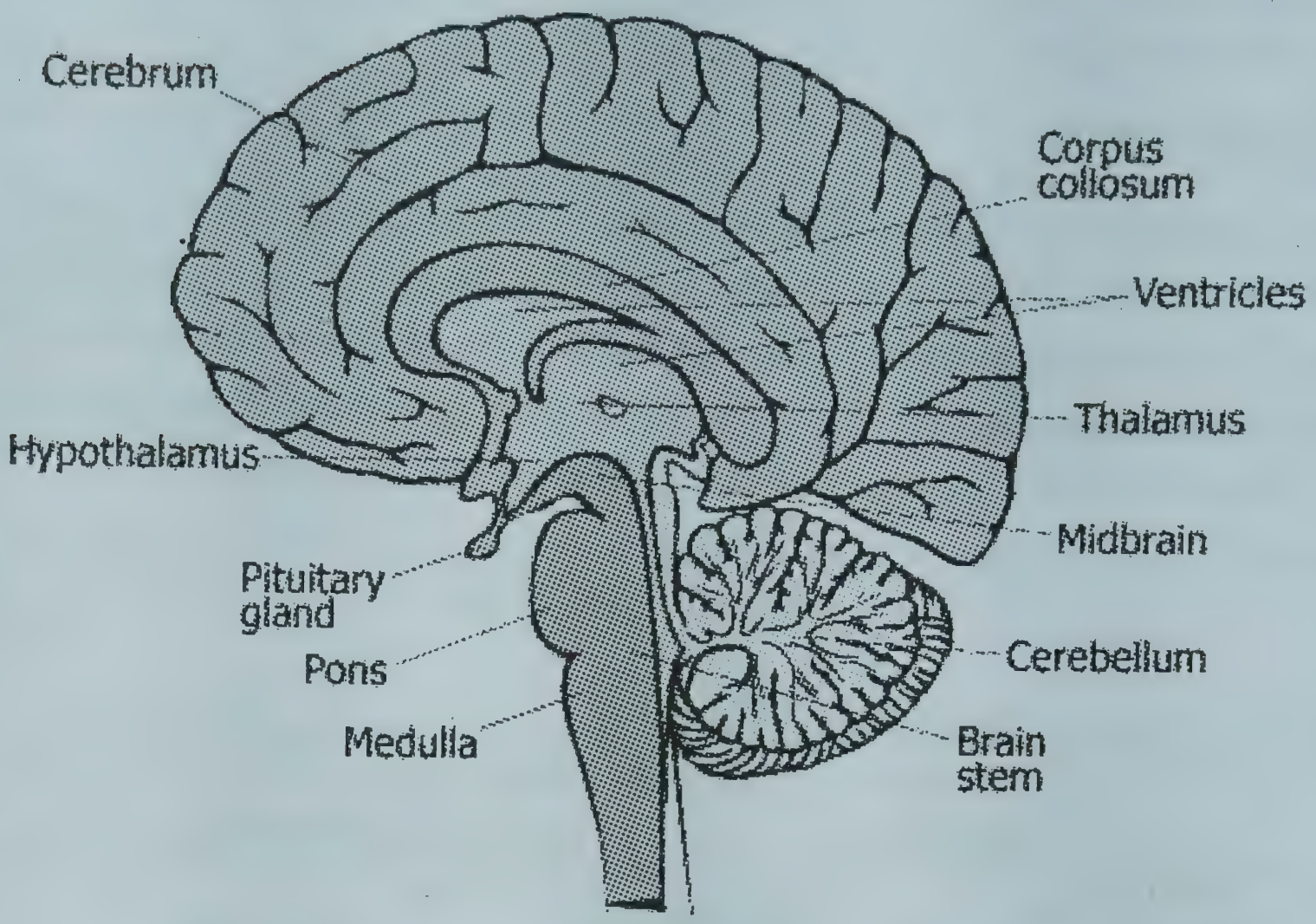
Every organ in our body has a specific function. Brain is the organ, which carries out all the functions of the mind. Brain of an average individual is about 1250 gms. It is made up of millions of nerve cells and connective tissue. Mental illnesses are brain disorders and let us understand the different parts of the brain, its functions and relationship to human behavior.

Figure 1 - BRAIN



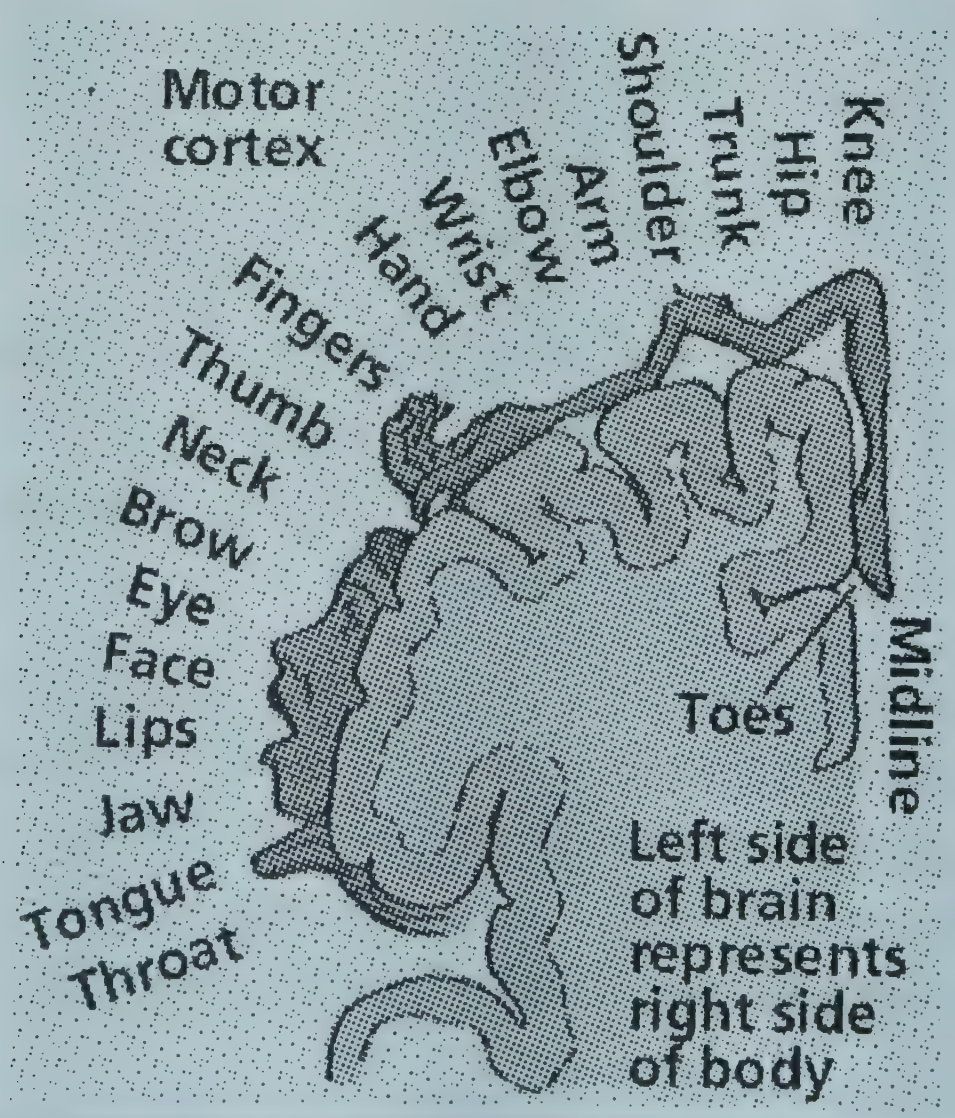
The brain consists of cerebrum, cerebellum and brainstem. **Cerebrum** is responsible for higher mental functions like **thinking, memory and intelligence. Cerebellum** is responsible for **coordinated movements of the body. Brainstem** contains both **sensory and motor pathways**. The vital centres controlling **respiration, heart rate, and consciousness are also located in the brainstem.**

Figure 2 - Cortex and the brainstem



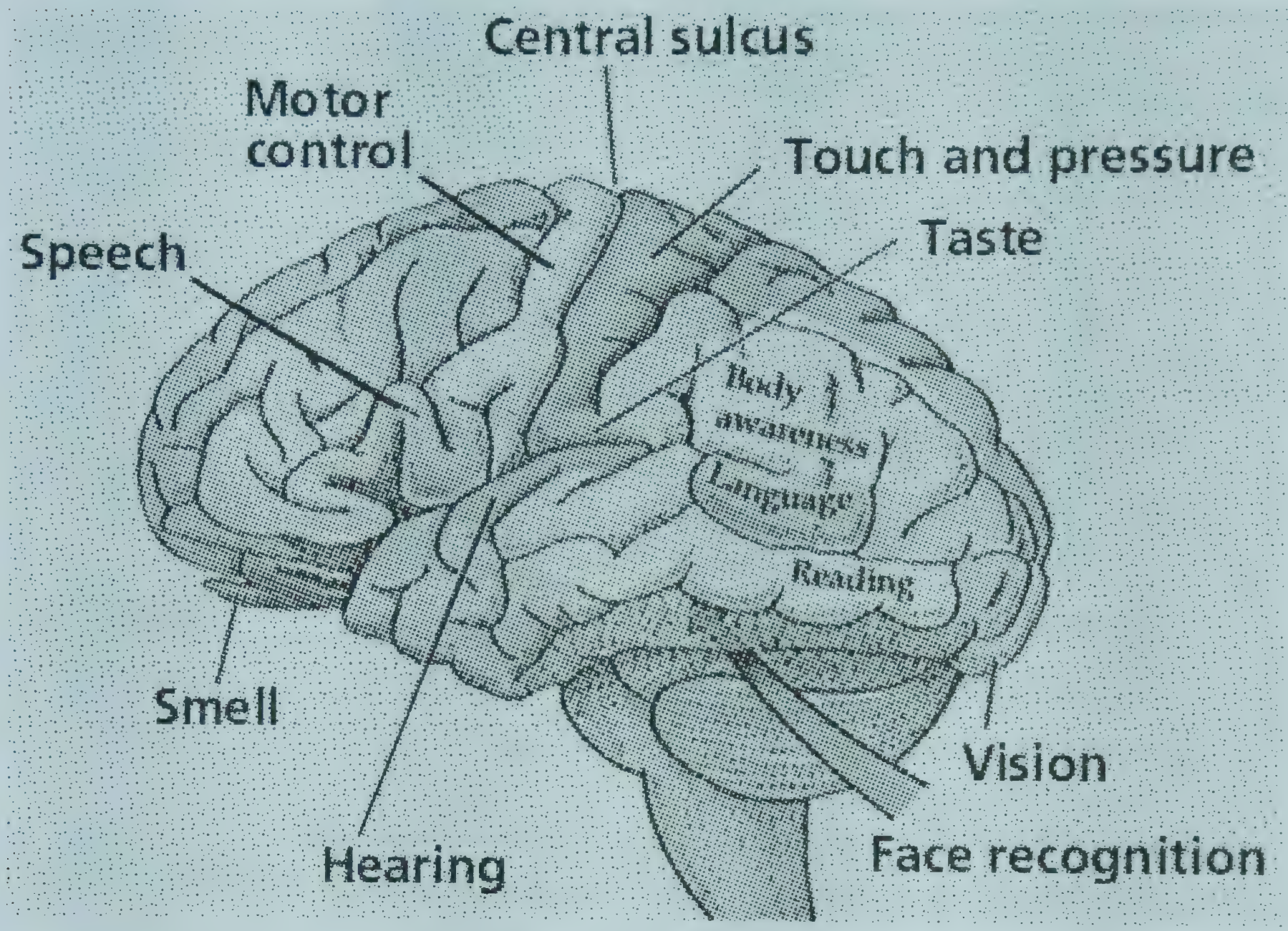
The cerebral hemispheres are further divided into **frontal lobes (responsible for thinking, social behavior and motor functions)**,

Figure 3 - Motor function of the motor cortex



Parietal lobes (sensory functions), occipital lobes (interpretation of the visual stimuli) and temporal lobes (interpretation of auditory, olfactory and gustatory stimuli).

Figure 4 - Areas of the brain and their functions

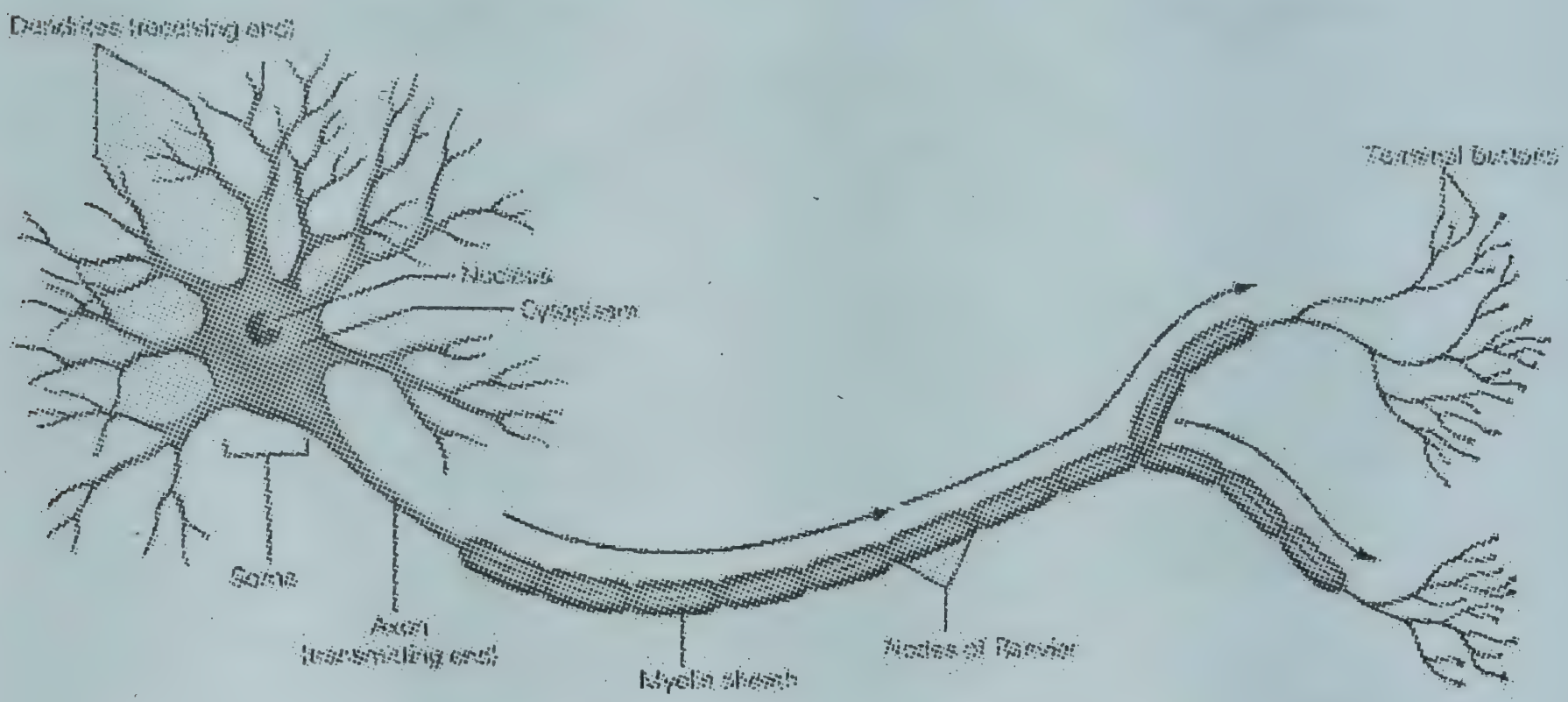


Limbic system, also known as visceral brain, is composed of several structures like amygdala, septal nuclei, hypothalamus, thalamus etc. Limbic system exerts a restraining force on the cerebral cortex. It plays a role in the controlled expressions of various emotions, eating, and sleeping and memory functions. Bilateral hippocampal damage can lead to recent memory loss and amnesias. Destruction of mammillary bodies leads to Korsakoff's psychosis (recent memory loss, confabulation, indifference are the features). Hypothalamus is the highest centre controlling sympathetic and parasympathetic nervous system as well as endocrinal functions and moderates the expression of different emotions.

WORKING UNITS OF THE BRAIN

Brain consists of a large number of units called the **nerve cells or neurons.**

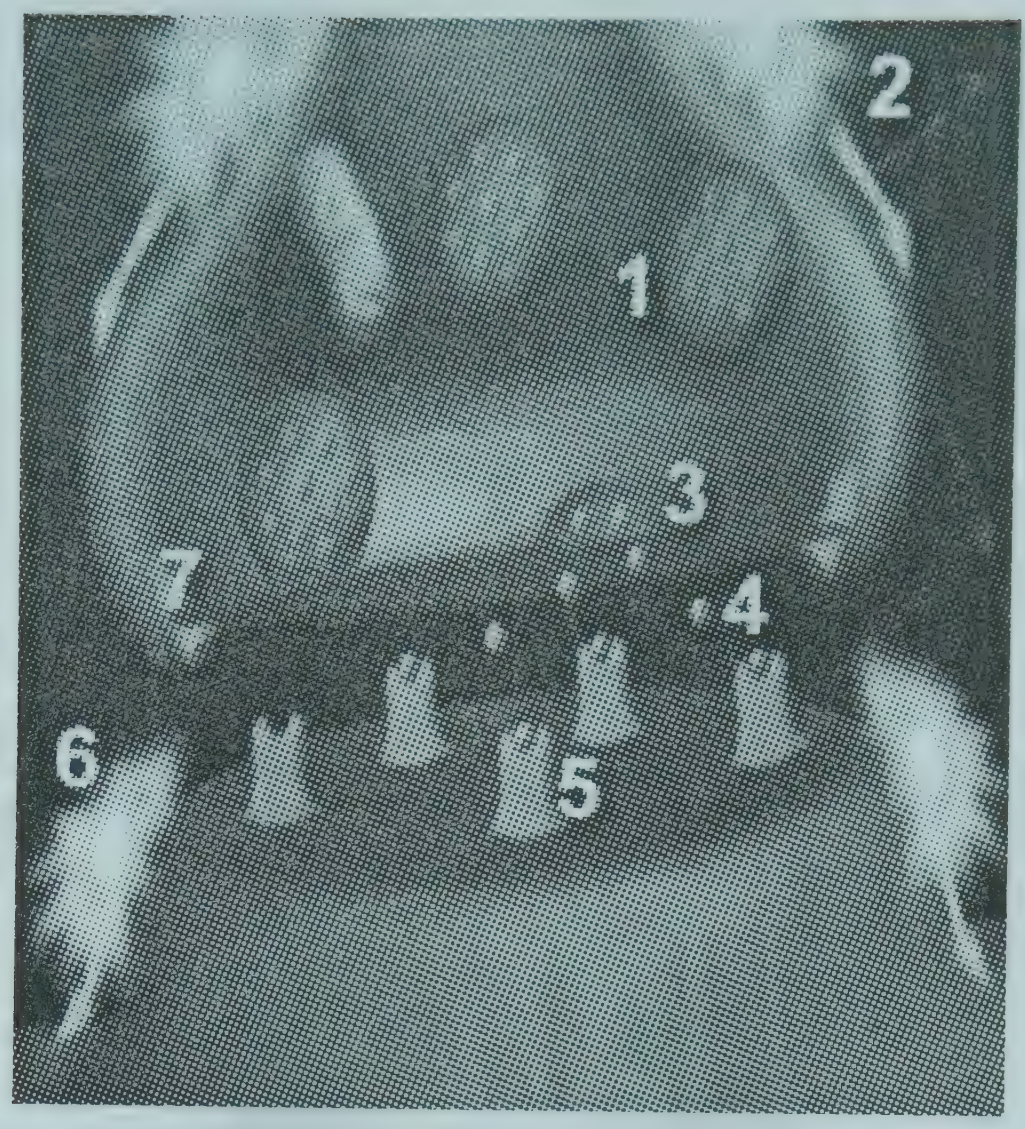
Figure 5 - Neuron



Each nerve cell is connected to many cells. These nerve cells are always active whether an individual is wide-awake or asleep; whether resting or working. Their activity is of chemical and electrical type. By placing electrodes on the scalp, these electrical activities can be recorded on paper by a special technique. This recording is known as electroencephalogram (EEG). By studying the EEG in states of health and illness, it is possible to get an understanding of the functioning of the brain in various conditions.

The space between nerve cells, where one nerve cell connects to another cell is known as '**synapse'.**

Figure 6 - Synapse



When a 'message' reaches the end of the nerve cell, it stimulates pockets of chemical substances and releases it into the synapse. These chemical substances are called **'Neurotransmitters'.** They act as messenger and help the messages to reach the other cell. When an individual thinks, talks, or does anything, many such neurotransmitters are actively involved in transmitting information from one part of the brain to the other. These neurotransmitters are acetylcholine norepinephrine, GABA, serotonin and dopamine.

As long as these neurotransmitters are produced, released and function adequately, the brain functions normally. If there are alterations in these substances, the functioning of the mind gets disturbed. For example, **decrease** in the amount of **noradrenaline or serotonin** can lead to depression. Hypersensitive dopamine system is believed to result in psychotic symptoms. These kinds of biochemical changes in the brain are some of the important factors responsible for onset of various types of severe mental disorders.

Poor blood supply, hemorrhage or use of toxic substances and intoxicating drugs can produce damage to the nerve cells. In old age, nerve cells gradually degenerate. In all these conditions, the functioning of the brain can be diminished or altered.

Left and right brain processes

Human brain has two hemispheres and each of them is involved in distinctive activity as mentioned below.

Table 1.

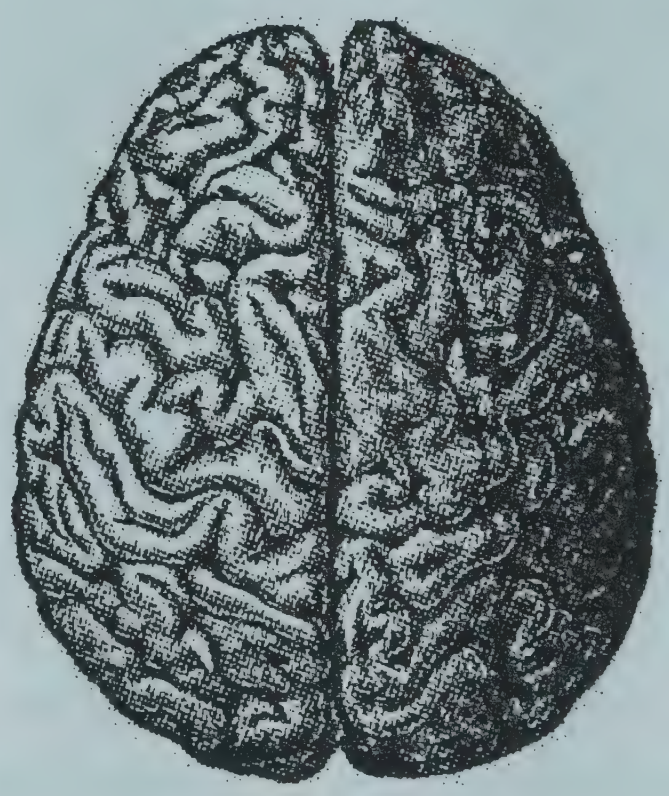
<table>
<tr><td>Left side processes:
• Speech
• Analysis
• Time
• Sequence</td><td rowspan="2">  </td><td>Right side processes:
• Creativity
• Patterns
• Spatial awareness
• Context</td></tr>
<tr><td>It recognizes:
• Letters
• Numbers
• Words</td><td>It recognizes:
• Faces
• Places
• Objects</td></tr>
<tr><td colspan="3">Fig 1. based on Sousa (1995, p. 88)</td></tr>
</table>

Table 2.

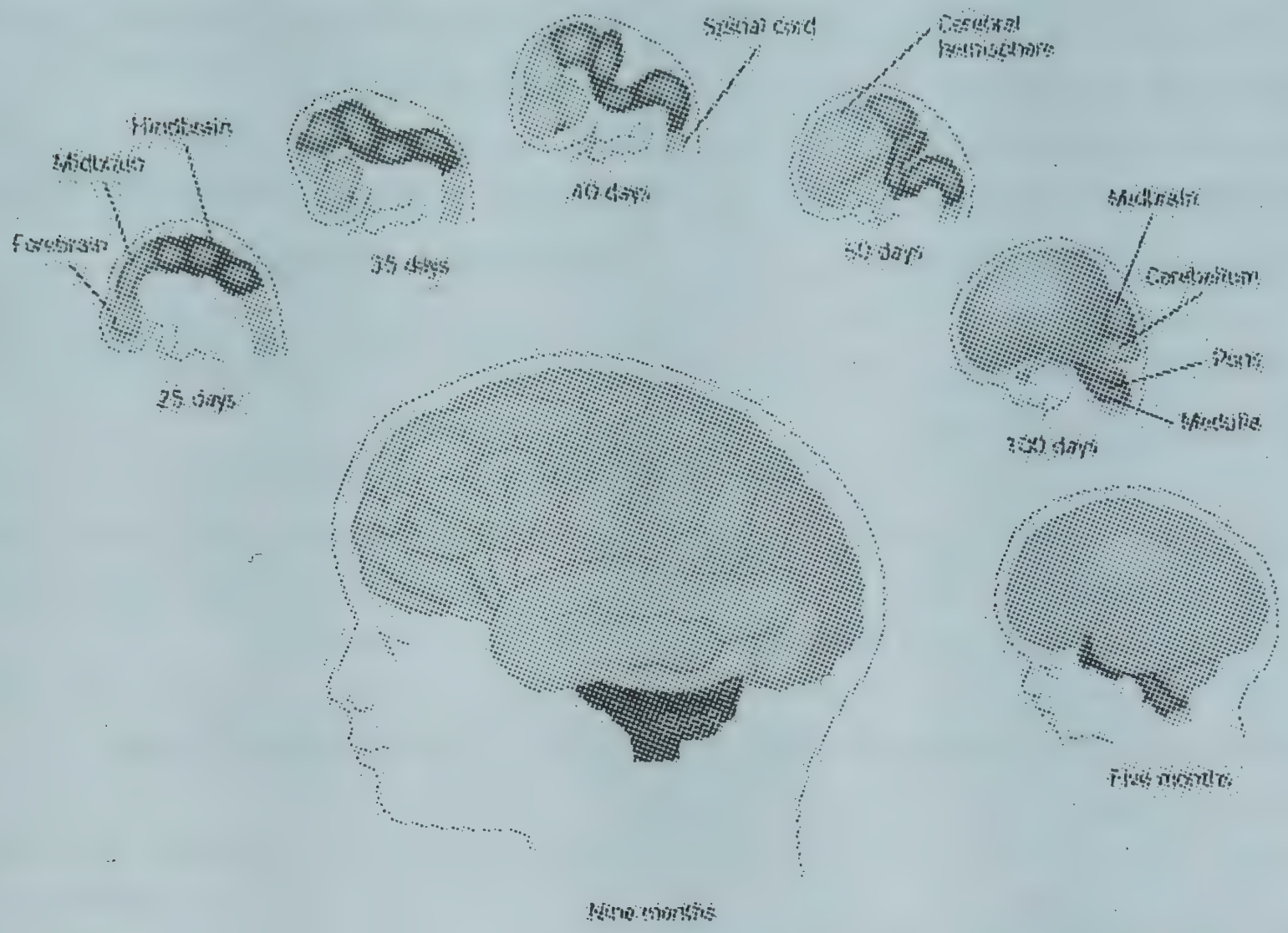
Left hemisphere functions	**Right hemisphere functions**
Connected to right side of the body	Connected to left side of body
Integrates many inputs at once	Deals with inputs one at a time
Processes information more diffusely and simultaneously	Processes information in a linear and sequential manner

Deals with space	Deals with time
Responsible for gestures, facial movements, and body language	Responsible for verbal expression and language
Responsible for relational and mathematical operations	Responsible for invariable and arithmetic operations
Specializes in recognizing places, faces, objects, and music	Specializes in recognizing words and numbers
Does intuitive and holistic thinking	Does logical and analytical thinking
The seat of passion and dreams	The seat of reason
Crucial side for artists, craftsmen, and musicians	Crucial side for engineers

DEVELOPMENT OF BRAIN

Nerve cells appear in the fetus by 4 weeks in the form of a tube. One end of this tube (towards the head) enlarges and develops into the brain. The brain of a newborn baby is more advanced in development as compared to other organs, and by two years, it is almost equivalent to the brain of an adult in its structure and weight. Protein is very essential for the growth of the brain during the developmental period. If there is undernourishment and protein deficiency during the intrauterine life and first two years of life, the development of brain suffers and this can lead to mental retardation. Enough care and attention has to be paid for providing nutritious food to the pregnant mother and the child to facilitate optimum development of the brain. The development of brain is more sensitive during these age periods than other organ systems in the body.

Figure: 7 - Development of the brain



The brain of the newborn is 'functionally' immature. The child can express a few emotions like fear and react to frustrations by crying. Except for basic skills like sucking, swallowing, bowel-bladder movement and reflex actions, the newborn child is dependent on the adults for survival. As part of the child's growth, the various mental functions develop. The child gradually learns to think, to remember, to understand the environment, to talk, to behave appropriately in different situations, to take decisions and acquire various skills like dressing, reading, writing, solving problems and control over biological functions.

PARENTAL ROLE

During the early stages of development children observe the parental and other adults' activities and try to imitate them. Children retain and repeat the activities which are appreciated and encouraged by the elders and decrease those activities which are not appreciated by them. **Thus, parents, and the family environment shape the mental development and behavior of the child.** A child who gets proper love and affection, encouragement and guidance from the elders grows well and develops skills that are essential

for successful living. Children learn to control the desires and to respect social and moral restrictions. On the other hand, a child who is overprotected or severely punished or those deprived of care or those with inadequate role models cannot learn the essential skills of life. Such children can develop faulty attitudes and behavior. These children can have problems in facing day-to-day life as they grow up. He/she can become dependent on others or experience distress. Such persons are more prone to develop different mental disorders, when confronted with significant problems.

The process of learning appropriate behavioral skills and modifying the wrong ones continues throughout the life of an individual. The process is dependent on the abilities and needs of the individual, expectations and reactions of the people and socio-cultural factors.

HUMAN BEHAVIOR

Different people behave differently. The same individual can behave differently in similar situations. Some of these behaviors may be normal and some may be abnormal. What controls behavior? The nature of the stimulus (E.g.: hunger, thirst, sex, loss, gain, separation, insult, happy or sad event, etc), the meaning of this stimulus as perceived by the individual, his personality and environment appear to decide the outward behavior. For example, hunger is a basic need. However, an individual who is a person who controls anger in work situation may act out at home and hit the family members. Many times, even in provoking situations every one of us try to control, but we may not succeed all the time. Some of the factors that influence behavior are:

1. Personality:

Attitudes, values, ability to develop and maintain relationships, energy level, concern for others, observing social and religious norms, ambitions and goals are all part of personality. Genetic factors, parental attitudes, child-rearing practices, amount of love, discipline, punishment received, role models available to develop various actions and reactions, shape the personality. Some are introvert personalities. They are hard working, less social, do not share their emotions with others and may be rigid in their attitudes and beliefs. Some are extrovert personalities. They are

very jovial, make superficial friendship with many, but may not be consistent in their commitments. Some may remain suspicious. Some may do anything to seek attention. Some can have inadequate personality and remain excessively dependent on others. Some can have aggressive personality. Some can have anti-social personality and are selfish, they do not learn from their past and they may indulge in unethical and anti-social activities. Thus, the actions and reactions of people with different personality types differ.

2. **Physical deficits and physical illness:**

People who have physical deficits (locomotor disability, hearing impairment, blindness etc.) or physical illness (like anemia, arthritis, asthma, fits, skin diseases, etc.) can behave differently than people who do not have any deficits or illness. Most often these individuals are sensitive. Physical exhaustion, chronic pain makes a person short tempered and can lead to inter-personal problems. Persons with physical disability should be provided with opportunities to lead a normal life.

3. **Stress:**

Stress is an individual phenomenon. It is a subjective unpleasant experience of the person who perceives his needs and or environmental demands beyond his abilities. An event or situation that is said to be stressful to one need not be stressful to the others.

Types of Stress

There are three types of stress namely I) frustration, 2) conflict and 3) pressure.

Occurrence of frequent disappointments leads to frustration. Conflicts may be i) to do or not to do or ii) to make a choice between two good things or among many or iii) to chose between devil and deep sea! Pressures can come from within the individual or from others circumstances to achieve certain goals and to perform better.

When an individual perceives a situation or an issue in his life as stressful, a series of changes are seen in the body. Hypothalamus and pituitary glands in the brain send messages to the adrenal glands to secrete more adrenaline

and prepares the person for either fight or flight. The following changes are seen in the body and mind.

1. Redistribution of blood circulation: In the normal state, 40% of the blood which is pumped out of the heart goes preferentially to the brain as nerve cells are always active and require glucose and oxygen all the time. In times of stress, more blood is rushed to the muscles in the limbs.
2. There is increased heart rate. Blood pressure increases. The person feels the 'heat' inside the body.
3. Since the body requires more and more oxygen, rate of breathing increases. Liver glycogen is converted into glucose and released into the blood, which is now available to the muscles.
4. Person experiences either fear or anger. Once the stress is removed or the person learns to cope with the stress, these changes are reversed to the normal level.
5. The external behavior of a person under stress is different than when he is not under stress.

In the last two decades, research has demonstrated the strong association between life stresses and emotional disorders. Stresses can be of varying intensity, ranging from the problems at work, personal misunderstandings, movement from one place to another or severe ones like death, divorce or loss of job. In addition, there can also be experiences like natural disasters like floods, earthquakes or man-made disasters like accidental fires, collapse of a building or a dam or leakage of toxic material from factories. These stresses can affect the mental health of an individual. Individuals going through stressful events, experience increased feelings of sadness, anxiety, irritability, and hopelessness. These individuals seek help from doctors with physical complaints like poor appetite, weakness, sleeplessness, decreased sexual interest or bodily pains. These complaints can be the starting point of physical diseases if stress in prolonged (e.g.: hypertension, peptic ulcer, myocardial infarction).

Behavior of an individual is the net result of his body constitution (genetic, growth and development of the brain) his psychological make up (experiences, knowledge, attitude, etc.) and environmental factors (family, social and cultural norms). All behaviors can be understood against the

background of these factors. For example: (i) Hyperactivity or under activity of mentally retarded child is related to the poor development of the brain (ii) temper tantrums of a child can be due to improper attention given by the parents, (iii) shouting of a person towards is subordinates can be the result of anger and frustrations, (iv) expression of socially not accepted ideas, behavior and beliefs by individuals can be the result of changes in the frontal lobe or other parts of the brain, (v) antisocial behavior of an individual can be the result of brain damage or reactions to problems in personal life or a reaction to social stresses, (vi) severe emotional reaction in an individual can be the result of past experiences or poor social support in a crisis.

Thus when individuals present with physical complaints or abnormal and behavior it is necessary to understand their behavior against the background of different factors in the individual, namely, the biological factors, early life experiences, current life situation, social and cultural factors.

Highlights

- **Brain weighs about 1250 gms and consist of three main structures viz. Cerebrum, Cerebellum and the Brainstem.**
- **Brain cells are called neurons and there are billions of them. Neurons are connected to each other at the synapses.**
- **Information is passed as signals from one place to the other with the help of neurochemical substances called neurotransmitters.**
- **Mental health problems are related to specific changes in the availability of neurotransmitters in certain areas of the brain.**
- **Neurons do not undergo cell division or repair and therefore damage to neurons results in irreversible changes after trauma, hemorrhage, intoxication or hypoxia.**
- **Brain has a number of cavities called ventricles and these are filled with cerebrospinal fluid. It acts as a cushion for the brain to prevent trauma.**

3. Mental Disorders

(Features, Types, Causes and Treatment)

WHAT ARE MENTAL DISORDERS

All individuals get emotionally disturbed at some time or the other due to a variety of reasons. Sometimes we feel sad while at other times behave indifferently in response to certain situations. Often, these responses do not last very long. The routine day-to-day functioning does not get disturbed and others are generally not affected in any significant way. These day-to-day changes are not considered to be abnormal. They would be considered as 'off moods' 'emotional upsets', 'losing temper', etc.

What is mental disorder? When can a person be considered mentally ill?

THREE CHARACTERISTICS OF MENTAL DISORDERS

1. Changes in one's thinking, feeling, memory, perceptions and judgements resulting in changes in talk and behavior that appear to be different from precious personality or from the norms of community.
2. Changes in behavior cause distress and suffering to the individual or others, or both.
3. Changes and the consequent distress cause disturbance in day-to-day activities, work, and relationship with important others (social and vocational dysfunction).

For example: Most students become anxious at the time of examination. They are worried whether they would pass and are afraid of the consequences of failure. But majority of them take the examination. Only a few become so anxious that they cannot study. They complain that they forget whatever they read and stay back from the examination. They do not get satisfactory sleep. They become more and more worried about their difficulties.

It is but natural for parents to feel sad when their child dies. They may not eat properly, sleep well or show interest in anything. They gradually reconcile and start attending to day-to-day work within 3 to 4 weeks. But they continue to feel sad about the death, weep, neglect the other children,

and the household responsibilities for months, sadness can be considered as abnormal.

Sometimes any one of us can have problems in sleep and may not be able to eat properly due to poor appetite. When we strain ourselves or think too much we can experience headache and feel exhausted. Since these last only for short periods, they are not abnormal. But if they recur often and last for longer periods, they can become disturbing. They could be considered as manifestation of 'illness'.

Therefore, for a person to be considered mentally ill, individual should have (i) mental symptoms, (ii) which bother self and\or others around, and (iii) disturb daily routine and work.

FEATURES OF MENTAL DISORDERS

1. Disturbance in bodily functions

a) **Sleep:** Patients find it difficult to get sleep. This can be in the form of lying on the bed or sitting and worrying for not getting sleep, or waking up in the middle of the night and failing to get sleep again. There can be a disturbed sleep throughout the night, or no sleep at all. In addition there can be no freshness in the morning. Any of these types of sleep disturbances can be present.

b) **Appetite and food intake:** Patient does not have appetite and eats less or although he has appetite he does not relish what he eats. He loses weight too. Sometimes there can be excessive appetite.

c) **Bowel and bladder movements:** Patient passes urine more frequently than before, or have loose-motions or become constipated. Some patients soil their clothes and remain unaware of it.

d) **Sexual desire and activity:** Patient can complain of decreased interest in sex or problems like premature ejaculation, impotence , lack of sexual satisfaction. In some conditions, there can be excessive sexual desire or lack of social inhibitions.

2. **Changes in mental functions:**

a) **Behavior:** Patient behaves peculiarly in a bizarre way and this behavior irritates the family members and others or puts them into very awkward situations. Behavior can be dangerous to self or others. Alternatively, it can be over activity, restlessness, abusing others for trivial or no reason (excitement) or patient may become dull, withdrawn and stop responding to either internal or external cues.

b) **Talk:** (and thinking): Patient talks excessively and unnecessarily or talks very little or stays mute. The talk becomes **irrelevant** and un-understandable (incoherent) or expresses peculiar and strange beliefs, which others do not share. For example, patient can say that somebody is pumping poisonous gas into eyes, thousands of worms are crawling under his skin or every food article served is mixed with poison (delusions).

c) **Emotions:** (feelings): Patient can exhibit excessive emotion (elation, sadness, anger, fear), inappropriate emotions to situations or can not express any emotion at all, laugh and/or weep, without any reason.

d) **Perception:** Patient can have disturbances in understanding various stimuli reaching him through the five senses. There can be misinterpretation or the patient hears sounds that others do not hear and say that enemies are coming to kill, sees images on the wall and says that it is a devil (illusions).

A mentally ill person can see images which do not exist or which are not seen by others. They can hear voices, which others cannot hear. They experience strange sensations of the skin. Thus, persons with mental illness perceive without any external stimulus and react as though the experience is true . This is known as "hallucination". For example, when the patient hears abusing voices, patient can in turn start abusing or threatening the imaginary persons. On seeing some people with dangerous weapons, he may run or attack people. A patient, who is hallucinating, is seen talking

to self, laughing or weeping, wandering in the streets, and arguing or behaving abnormally.

e) **Attention and concentration:** Patient can have decreased attention and concentration.

f) **Memory:** Patient can lose his memory and start forgetting important matters. They forget what they see, hear, or experience a few minutes earlier. They cannot remember where they have kept a pen, spectacles, umbrella, etc. They cannot remember the transactions made a few days ago and people they met a week earlier. They can lose past memory and find it impossible to recollect the names of children, where brothers and sisters live, etc. They can lose their way in a familiar place.

g) **Intelligence and judgement:** In some mental illness, intelligence and the ability to take decisions deteriorate. Patient loses reasoning skills and abilities, and makes mistakes in routine work. Patient may not able to do simple arithmetic and reacts like a 'dull' person.

h) **Level of consciousness:** In some mental illness, due to possible brain damage there can be changes in the level of consciousness. Patients fail to identify their relatives. They can be disoriented to time and place (disorientation). They may remain confused or may become unconscious.

3. Changes in individual and social activities

Individual: Patients can neglect their bodily needs and personal hygiene. They may not take a wash, comb hair, shave, take bath, change clothes, etc. They can remain unclean. They may not bother even when things cause pain and discomfort. They can soil clothes and bed in severe illness states.

Social: They can behave strangely with their family members, friends, colleagues and others. They can insult them, abuse/assault them. They can behave in an inappropriate manner in social situations and embarrass others. Patients can behave rudely and others get annoyed with them or make fun of them (loss of social sense). To begin with, patients keep themselves away from people, later on, people keep away.

4. **Somatic complaints:** Aches and pains in different parts of the body, fatigue, weakness, involuntary movements, unpleasant sensations and many symptoms related to heart, lungs, kidney, digestive organs without disease in those organs.

Types of Mental Disorders

I. **Psychosis:** It is a severe type of mental disorder in which patients talk and behave abnormally. Persons suffering from psychosis have disturbances in thinking, feelings and perception. The functions of the body and mind are severely disturbed resulting in gross impairment of individual and social activities.

1) Loss of touch with reality
2) Symptoms like hallucinations, delusions
3) Neglect of body needs and personal hygiene
4) Socially disruptive behavior like aggression and violence
5) Neglect of work and responsibilities.

II. **Minor Mental Disorders:** Patients show either excessive or prolonged emotional reaction to stress situation. They have symptoms like anxiety, fear, sadness, vague aches and pains and other bodily symptoms. They are aware of their problems and seek help. They do not have psychotic symptoms.

III. **Alcohol and substances dependence**

IV. **Childhood behavior problems:** These are mostly disturbances of behavior and conduct occurring in stressful family situations or as part of development, manifesting as abnormal behavior not appropriate to the age of the child.

Mental retardation: These persons have decreased mental abilities and cannot adjust to usual demands of living like normal persons.

V. **Epilepsy:** It comes in attacks in which the patient loses consciousness, falls down and has rhythmic movements of the body. Children and young adults are more often affected.

CAUSES OF MENTAL DISORDERS

1) **Changes in the brain:** Any changes either in the structure or functioning of the brain can give rise to a mental disorder. Biochemical changes at the level of nerve cells are the cause in majority of the severe type of mental disorders (psychoses). Damage to the structure of the brain due to any of the following reasons, can cause mental disorders. a) Infections, b) Injury, c) poor blood supply, d) Hemorrhage, e) Tumors, f) Alcohol intake for long periods, g) Nutritional deficiencies, h) Untreated fits, i) Degenerative diseases.

2) **Hereditary factors:** In few cases of mental disorders, there can be some one in the family suffering from a similar illness. But in most cases, there would not be anybody in the family who has a mental disorder. The proneness for developing mental disorder is genetically transmitted to an individual but whether an individual would actually manifest the illness depends on many other factors.

3) **Childhood experiences:** Proper love, affection, suitable guidance, encouragement and discipline are necessary for healthy growth of a person. If they are not available and there are repeated unhappy experiences in the childhood, they can lead to mental disorders in childhood as well as in adult life.

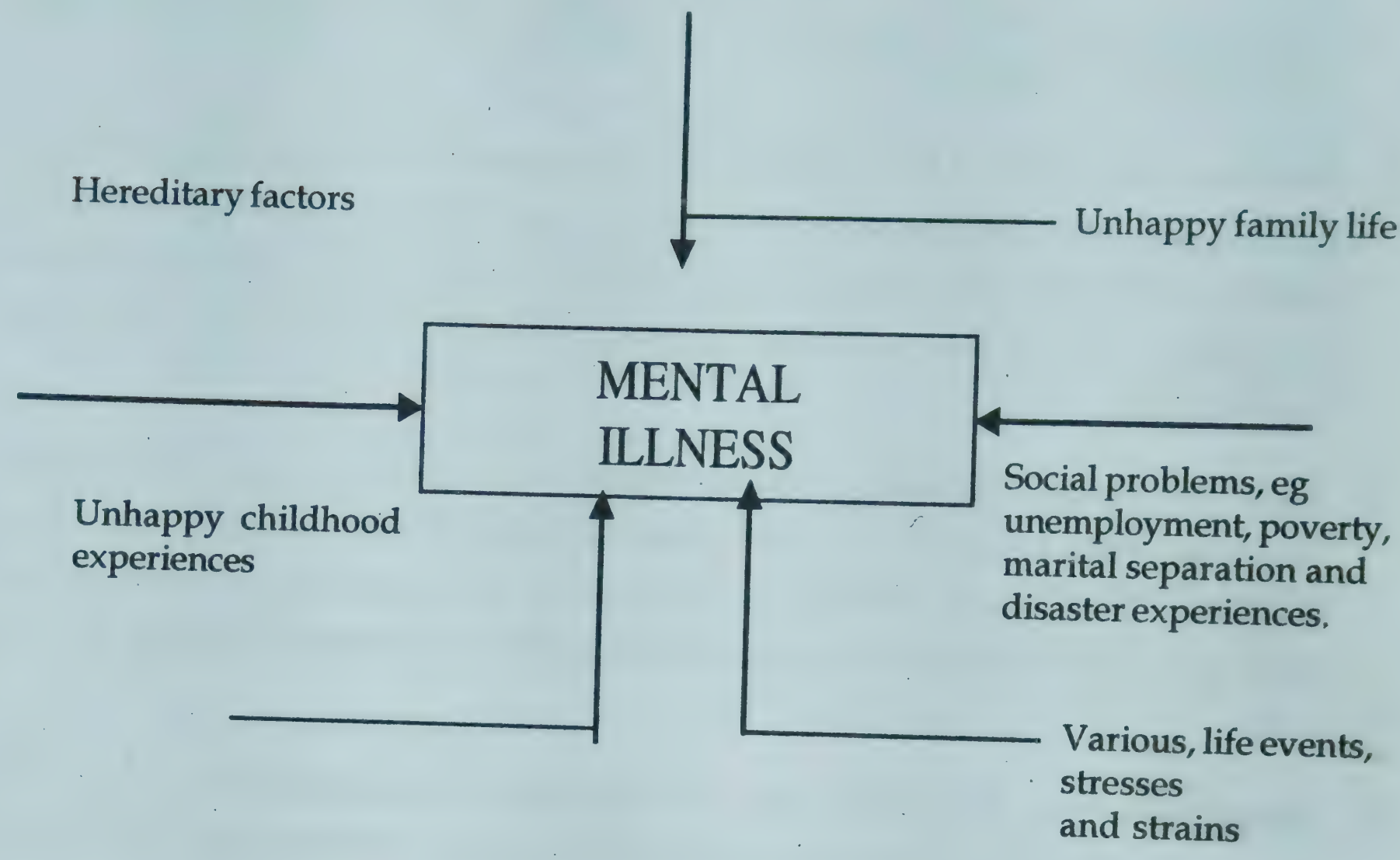
4) **Home atmosphere:** Frequent quarrels, misunderstanding among family members, lack of warmth and trust among them can have untoward effects on the person. Such a person when faced with stress and strain can develop mental symptoms due to the limited skills to adjust and control emotions.

5) **Social factors:** An individual not getting fair opportunities and facilities to live in a society can be mentally distressed and such persons can develop mental health problems . Poverty, unemployment, injustice, insecurity and severe competitions, disaster experiences can result in mental disorders.

6) **Individual factors:** Poor self image, severe conflicts in life, perception of a big gap between ambition and actual achievements, disorganized

life style, perceiving life events and environment as stressful, poor moral and ethical standards, severe guilt can also predispose to mental disorders.

Figure 8 - Changes and diseases of the brain



TREATMENT OF MENTAL DISORDERS

As noted above, mental disorders are of various types. They affect the individual to varying extent. They can be of short duration or of longer duration. The treatments available are varied. Lay people believe that there is no effective treatment for mental disorders.

This wrong notion arises because people generally think of the situation in the past when patients stayed in mental hospitals for life. **In the last 50 years, scientific developments in neurosciences have made availability of specific drug interventions for chosen mental disorders. These interventions are as effective as in the case of treatments for physical illness like tuberculosis, leprosy, malaria, typhoid fever, pneumonia or hypertension.**

The different types of treatments available are

(1) **Pharmacotherapy/drug treatment:** These are most suitable for the treatment of acute cases of severe mental disorders, commonly called psychoses and epilepsy. With early identification and appropriate treatment, majority of persons with mental disorders recover from distressing mental symptoms. They remain well for long periods of time with regular treatment.

(2) **Electro - convulsive therapy (ECT):** Commonly thought of as the main treatment for all mental disorders in the past. This is another method of treatment for severe depression and psychosis. When used in **selected patients,** it can bring about dramatic improvement as in severe depression.

(3) **Psychotherapy**: Persons in situations of stress experience psychological distress. Such persons can be helped by simple methods like listening to their difficulties, talking to the family as a group, bringing about changes in the living situation to bring about greater harmony in their life.

(4) **Rehabilitation**: Rehabilitation means helping mentally ill person lead a near normal life after remission of symptoms. Resumption of normal life activities may be delayed due to disability in the person. Such persons can benefit by simple measures like involving them in recreational activities, teaching them simple repetitive type of jobs (basket making, gardening, etc.) and not excluding them from ordinary life. With love and training, much improvement can be brought about in these cases.

(5) **Social and cultural therapies:** Traditional cultural and creative activities can help the individual to have the required diversion, recreation and improve his psychological well-being. The examples of such activities are: 1) music, 2) arts, 3) yoga and meditation, 4) spiritual activities, 5) reading and 6) group work. The above methods may be used in different combinations to treat the different mental disorders.

Highlights

- Mental disorders are brain disorders.
- Psychotic illnesses are characterized by changes such as behavior, thinking, perception, emotions, ability to take responsibility and biological function.
- Depressive illnesses are characterized by loses such as low mood, loss of interest, energy, sleep, appetite, weight, libido, and hope.
- These illnesses are related to specific changes in certain areas of the brain with respect to availability of neurotransmitters.
- Mental disorders manifest as disturbances in behavior and these changes are understandable.
- Mental disorders are due to multiple causative factors
- Illness manifest before third decade of life and most mental disorders are treatable and some of them are curable.
- Economical, effective and safe medications are available to treat mental disorders

Frequently asked questions

1. **Do psychiatric or neurological disorders predispose to antisocial activities?**
   Indulgence in antisocial activities despite being punished for the same repeatedly, amounts to personality disorder. Certain neurological problems like frontal lobe syndrome can present with behavior problems.

2. **Is antisocial activity a psychiatric or neurological disorder?**
   Antisocial activity like robbery, cheating, vandalism and indulgence in violence in ongoing manner without realizing that it is unacceptable amounts to personality disorder.

3. **Is reincarnation a sign of mental illness?**
   No.

4. **What are the biochemical changes responsible for mental illness?**
   Ref to power point slides.

5. **Case scenario: A male person exposing his external genitalia or private parts in public. Is this a psychotic disorder?**
   This is a condition called exhibitionism – a sexual perversion. It is unlikely to be due to mental disorder. Deliberate exposure of genitals in public for sexual gratification is not seen in psychotic individuals.

4. History Taking and Mental Status Examination

INTRODUCTION

Establishing a satisfactory doctor-patient relationship is essential for comprehensive assessment, accurate diagnosis and appropriate management of patient's emotional problems. This is in keeping with the level of mental health care expected from primary care physicians in their settings. The quality of the doctor–patient relationship is important in all disciplines of medical practice, it is perhaps most crucial in primary health care and care of the mentally ill persons. The ultimate success of this relationship is determined by what occurs between the doctor and the patient. This largely depends on the doctor's ability and skill to convey his/her concern and warmth to their patients as part of their work in the hospitals and clinics, thus building up a rapport and a relationship of trust. Most primary care doctors are trained to investigate, diagnose and treat 'diseases' in various organ systems of the body. Doctors are less trained to listen to and provide help for persons with emotional problems.

GENERAL REACTIONS TO MENTALLY ILL PERSONS

As a first step, it will be worthwhile to consider your own emotional reactions to the mentally ill since, these reactions will directly or indirectly reflect your approach to these patients. In the previous chapter it was noted that mental illness is broadly divided into two groups, namely, psychoses which are the more severe disturbances and neuroses which are minor psychiatric problems.

When a doctor sees **a severely disturbed mentally** ill patient, the emotional reaction is likely to be one of the following; (1) Fear and apprehension that the patient may be harmful, (2) dislike because patient is dirty, (3) anger and rejection because patient is arrogant and his behavior annoys all , (4) sympathy and pity as patient is suffering, (5) amusement and laughter due to some of the odd/ funny behavior, (6) distrust and disinterest as patient may behave in an unreliable manner.

A primary care doctor may try to keep himself away from such patients. Even if he is interested in helping the patient, he may not know how to talk to the patient and manage him. Either disinterest or ignorance can make the doctor develop an attitude of **'why should I bother, patient is after all a madman, let me refer him to the mental hospital/ a psychiatrist '**.

With patients of **minor mental disorders (neuroses),** the reactions are likely to be different. In the first place, there can be difficulty in diagnosing them. Next, there can be dissatisfaction with the treatment response. Patients' persistent somatic complaints, repeated visits to the clinic and their tendency to cling or linger on may make the doctor dislike them. Some of their complaints may puzzle the doctor because they are multiple, apparently vague and diffuse. Detailed physical examination and investigations may not reveal any abnormality. Sometimes though the doctor knows that a patient with somatic complaints could have psychological problems, the doctor may have difficulty to change the approach from precise and concrete physical signs and symptoms to understanding psychosocial factors and manifestations due to lack of skills.

APPROACH TO MENTALLY ILL PERSONS

Most patients, including the severely disturbed are capable of understanding their doctor's reactions and responding to them accordingly. The doctor's effort, initially, should be to establish a good doctor-patient relationship. All patients need to understand that their doctor is genuinely interested and concerned about them, and he is willing to listen to their problems attentively and carefully. It is important to develop a genuine desire to help the patients and communicate this interest to them.

How can the doctor's interest and concern for the patient be communicated? Listen carefully to the patient and give him an opportunity to express problems freely with least interruptions. Maintain eye contact with the patient as he narrates his difficulties. Acknowledge and respond to what the patient says verbally and /or non-verbally (gestures like nodding). By conveying the constraints of time and appearing to be in a hurry, the doctor might seem insensitive to the emotional distress / needs of the patient. Therefore, it is important to communicate that you have no

time and you are willing to see the patient at a later date, if there are difficulties with time.

The treating doctor has to be very careful about his own emotional reactions, while approaching a **severely disturbed patient.** Doctor should recognize one's own reactions and make every effort to moderate them. Show of trust, respect and concern for the severely disturbed patients, in turn will make him feel comfortable, reassured and acceptance of the doctor by them.

Mentally ill persons are human beings with their own feelings, thoughts, likes, dislikes and self-respect like most of us. Doctors should remember that patients expect to be treated as a responsible and respectable individual. It is essential to treat patients as people suffering from health problems and also understand their needs and help them to the best possible extent. Doctors should not do anything to degrade the self-respect. Doctors should not comment, confront, criticize or laugh at the patient. It is important to try to understand what the patient has to say.

- Get a detailed account of the onset, nature and course of the symptoms.
- Ask open ended questions: Instead of asking 'Do you cry when you are upset?' ask, "when you are upset, what do you do?" or "can you describe how you feel when you are upset?" Such questions help people to describe their difficulties in their own unique way.
- Find out the situations when the patient develops the symptoms. "Can you recall and tell me, when and where you get the headache?"
- Pick up clues to elicit the areas of stress e.g. Patient: "I get headache when I am alone.

  Doctor: "Do you feel lonely, do you feel that you are not cared by others".

  Patient: Yes, doctor.

  Doctor: Who are the ones you think are not caring for you

  Patient: ..... My parents did not care for me .... Now, my husband also does the same.

If the person is hesitating to talk, give a paper and a pen, and this encourages him/her to write about their problems.

After the patient's description of the problems, talk to the close relatives who stay with him and collect details of other problems. If there are discrepancies in the information given by the patient and relatives, do not get alarmed but draw their attention to this and request them to clarify. While interviewing patients or their family members, ask only what is necessary and do not ask unnecessary details. Never ask information just to satisfy your curiosity. Do not ask very personal questions or questions regarding sexual matters in front of others. When this information is required, try to obtain them when the patient is alone. Assure the patient that these details will be kept confidential.

HISTORY TAKING

The general principles of history taking with mentally ill patients are in many respects similar to that in general medical practice. The patient's own description of current problems have to be heard first. Patient's illness has to be understood in the context of the family, job, social and cultural environment. Open-ended general questions only should be asked initially. More specific questions can be asked later on, after the patient has completed the description of his complaints in his own words. The details of the patient's symptoms started and progressed, (i.e. onset and course) in a chronological order are important. Patients should be encouraged to go back to the time when they were completely symptom free. The degree of severity of the symptoms, their effects on patient's daily activities and bodily functions like sleep, appetite and bowel/bladder functions must be enquired. It would be important to know what explanation patient gives to the symptoms and complaints.

The family history and personal history have special relevance in the assessment of mentally ill patients. The causation and manifestation of several types of emotional disturbances can be understood by knowing the socio-cultural background of the family for the management of the patient's problems. History of mental illness in any of the family members and information about the person till date. It should include early development,

childhood, schooling (and educational attainments) work (occupation). The completed history should contain information about any past physical or mental illness. An attempt must be made to know what kind of a person the patient was before the onset of the illness. In short, the history taking should be an effort to understand the patient as a whole, and not just aimed at obtaining the details of his symptoms.

Symptoms and signs (checklist)

- ☐ Unconsciousness
- ☐ Clouded consciousness
- ☐ Injury/tongue bite
- ☐ Tonic/clonic movement
- ☐ Incontinence
- ☐ Attack in sleep/when alone
- ☐ Delayed milestones
- ☐ Speech difficulty
- ☐ Physical handicaps
- ☐ Scholastic backwardness
- ☐ Limited social skills
- ☐ Fear/anxiety
- ☐ Palpitation
- ☐ Giddiness
- ☐ Headache
- ☐ Tremors of hands
- ☐ Difficulty to concentrate
- ☐ Body aches/pains
- ☐ Weakness/tiredness
- ☐ Sexual problems
- ☐ Excess activity
- ☐ Dull/withdrawn
- ☐ Excess/un-understandable speech
- ☐ Hallucinations (any modality)
- ☐ Elation/excess happiness
- ☐ Violence and aggression
- ☐ Anger/irritability
- ☐ Sadness
- ☐ Suicidal ideation/attempt
- ☐ Delusion (false belief)
- ☐ Disorientation
- ☐ Loss of memory/forgetfulness
- ☐ Sleep and appetite disturbance
- ☐ Self neglect
- ☐ Brief episodic abnormal behavior
- ☐ Alcohol abuse
- ☐ Abuse of other drugs

Frequency of symptoms: Episodic / continuous

Family history : Mental illness/M.R./epilepsy

Past history : Mental illness/epilepsy

Associated events : Fever/head injury/alcohol use/psychosocial/ stress/significant physical illness

Physical examination : Normal/abnormal (specify)

.....

Investigation : Normal/abnormal (specify)

.....

Diagnosis :

- ☐ FUNCTIONAL PSYCHOSIS (Schizophrenia/ Mania/Depression)
- ☐ ORGANIC PSYCHOSIS (Acute/Chronic)
- ☐ EPILEPSY (Generalized/Focal/Febrile)
- ☐ MENTAL RETARDATION
- ☐ DRUG DEPENDENCE (Alcohol/Other drugs)
- ☐ NEUROSIS (Anxiety/Depression/Hysteria)
- ☐ Others Specify_____
- ☐

Treatment:

_____

_____

_____

_____

Highlights

- Examining persons with mental health problems in the clinic is no different from examining people with physical health problems.
- Information about the onset of symptoms should be elicited in a chronological order.
- A structured proforma is used during the training program.
- A simple proforma is used for documenting the symptoms manifested by the patients during evaluation in the primary health center.
- Diagnosis is based on eliciting disturbances in thinking, emotions, perceptions, memory, orientation, judgment and awareness about the illness.
- Good eye contact, listening, non-interrupting, supportive, asking open ending questions are important for good doctors–patient relationship.
- Interview should be an interaction between the patient, family and the doctor. It should never be interrogative.

5. Major Mental Disorders
(Psychoses)

INTRODUCTION

Each of us is very individual in our own way. Every individual has different interests and methods of dealing with different situations in life. Similarly, behavior of individuals to life situations is also not uniform. However, most of the people in one community have fairly similar ways of thinking (mentally reacting), feeling and behaving. In all communities, there are agreed norms as to what should be considered normal and what should be considered 'abnormal'. For example, nobody will consider the wearing of colorful dress to a village get together or a fair as abnormal, but anyone coming with similar dress to sad occasions will be immediately considered as being abnormal, by almost all persons.

In the medical sense, any persistent and severe disturbance of thinking, feeling and behavior is considered abnormal. In the past such conditions were called **'insanity or melancholia'**. Modern science classifies them as **Psychosis**. In popular language, persons suffering from such a conditions are often wrongly referred to as 'mad' or 'insane'.

Till recent times, persons with severe mental illness were feared and managed harshly by using physical restraints like tying up, chaining or isolating them by locking them in a room. Some also considered mentally ill persons as holy men and cared for them with respect. **In the last 40 years medical treatment has become available which can make these ill persons normal in a very short period of time so that they lead a normal life.** The following section deals with persons having Psychosis - their recognition and care. It is estimated that 5-6 persons in 1000 population suffer from one or other form of psychoses at any point of time and every year about 5-6 people develop this illness per 10,000 population.

MISCONCEPTION ABOUT PSYCHOSIS

The general public does not recognize psychosis as an illness. Abnormal behavior is thought to be due to religious and supernatural causes. Behavior

is attributed to phenomenon like 'ill will of Gods' and visitation of evil spirits and possession by souls of dead persons'. As a result of these beliefs persons with psychoses are usually taken initially to religious healers, magicians, temples instead of a doctor. It is also thought that there are no medical methods of treating psychoses.

It is very important to recognize and remember that psychotic illness is similar to other physical problems in that persons can recover from them as much as those suffering from physical problems. Like other disorders, the outcome with treatment varies with the severity and type of the problem and the time of starting treatment. Early treatment gives the best results.

IMPORTANCE OF CORRECT TREATMENT

Psychosis is a disabling illness; it strikes young people at the most productive years of their life, lack of treatment is one of the most important reasons for chronicity. A person suffering from psychosis can be dull and withdrawn, he can wanderaway aimlessly, he can be excited and aggressive at times. Such persons are restrained and isolated from others in the community. All of these factors result in burden for the family. Untreated persons remain unemployed; their marriages break down because the spouse is unable to cope with the ill person. **In other words onset of psychosis is like a disaster in the family and early identification and treatment can prevent adverse consequences for the person, his family and the community.**

TYPES OF PSYCHOSES

Psychosis can be divided into two subgroups. They are functional psychosis and organic psychosis.

Functional Psychoses are forms of psychoses where there are no detectable abnormalities in the structure of the brain or other organ systems of the body. **In organic psychoses,** symptoms are the result of disturbances in the brain (infection, trauma, tumor etc.) or disturbances in the other body systems (congestive failure, pneumonia, uremia, hepatic failure etc).

The different types of psychoses and their management are considered in the following section.

1. FUNCTIONAL PSYCHOSES

There are three major types of functional psychoses namely:

1.1 Schizophrenia

1.2 Affective psychoses

1.3 Acute psychosis

1.1 SCHIZOPHRENIA

Some case histories will illustrate the schizophrenic illness

Papu is a 21-year-old man from a rural area who completed his primary school and started assisting in the agricultural work of his family. He was a quite and calm person with only few friends. His relationship with others in the family and village and his work was considered satisfactory. Since the last few weeks, he has been quite and withdrawn, does not talk to others–even to family members. He has not been working well too. He looks different, as he is in his own world, not aware of what is going on around him. He is irritable, sleepless and doesn't take his food regularly. On enquiry, the relatives mention that, he mutters and smiles to himself. His answers to questions put to him are not understandable (inappropriate). At times he acts in a very strange manner. He looks at the roof and gesticulates. Sometimes he looks scared. He has been neglecting his personal hygiene. On talking to him, he reveals that some external force controls his thoughts and actions. He hears commanding voices ordering him to do certain things. Parents report that there have been no major life changes preceding the onset of illness.

Satish, is a 24-year-old male. He has been reported to be talking and behaving strangely since last several days. He is restless and hostile with people around him. He abuses them and even attempts to assault them when he gets angry for no understandable reason. He does not sleep at night. He keeps talking to himself and shouts at times. He has stopped working. On enquiry the relatives mention that he is unduly suspicious of everybody and everything around him. He says that others are talking about him. He believes that people are plotting to harm him and destroy him. He hears the conversations of these people who are against him. Some of them are people

known to him while others are strangers. Sometimes he hears his own thoughts as if somebody is shouting from somewhere. At other times he can hear a running commentary of his actions. Because of these experiences, he is scared to move around.

Poonam, is a 34-year-old married female who has been separated from her husband and is presently living with her old parents and brother. She has been ill for the last 5 years, with periodic episodes of exacerbation symptoms. She has never been completely well at any time during this period. Her illness started few years after her marriage. Her relatives are unable to give details of the onset and development of her symptoms. Presently she does not do any work regularly. She eats and sleeps, as she likes. She stays at home and in her village for few days of the month while at other times wanders and begs around in the near and far off villages. Everybody including the children know her as a 'mad woman' in these villages. After she became sick, her husband had taken her to various traditional healers but she continues to be ill. He has sent her back to her parents and they believe that there is no treatment for her 'madness'

The above three examples are of a mental illness called **'SCHIZOPHRENIA'.** The choice of sexes in the examples does not indicate any specific type of association with the type of illness and sex of patient.

Schizophrenia is the commonest of the psychoses and the symptoms of this illness closely correspond to the layman's concept of madness. It is an illness, which interferes with individual's personal and social functioning and if untreated, can run a chronic course. Schizophrenia usually starts in the age group 15-25yrs. The onset can be acute or insidious. Sometimes the onset may be precipitated by a stressful event. The illness affects both sexes equally and occurs in all social groups.

The illness is characterized by abnormalities of **thinking perceptions** and **emotions** resulting in abnormal behavior, action and talk. An individual with schizophrenia has abnormal ideas and thoughts of various kinds, which the individual believes and are unshakable **(delusions).** The ill person perceives things, which really do not exist (i.e. hears voices and sees visions which are non-existent - **hallucinations).** Ill persons misinterpret the environment and give special meaning for normal events. The individual

can be inappropriately happy or sad or apathetic and unconcerned. Because of these experiences, talk and actions might become ununderstandable and inappropriate. They can either talk too much or too little (or not talk at all- being mute). They can be found talking and laughing to self. **(This behavior is the response to strange experiences like the hearing of voices).** They can be withdrawn and inactive or restless and hyperactive. At times they can become suddenly hostile, abusive and assaultive in response to an unpleasant thought or hearing of voices. Periods of excitement may be followed by periods of extreme withdrawal when patient may remain in uncomfortable and bizarre postures for long periods of time. Varying degrees of sleep disturbance will always be present. The illness is characterized by changes in personal, social and occupational functioning. It is very essential to remember that in actual clinical practice, **only some of the above features may be present in any given patient.**

Both genetic and environmental factors are important. Factors like family relationships, socio-cultural factors, severe psychological stresses of any kind are important in the occurrence of schizophrenia. These factors operate in different combinations and degrees to predispose, precipitate or perpetuate schizophrenic illness in an individual. Although the etiology is not definitely known, what is certain is that **causation is multifactorial.** It is currently understood as hyper sensitive "Dopamine system' (Neuro transmitter) is responsible for the symptoms of schizophrenia. This means that Dopamine concentration is very high in certain areas of the brain and as a consequence of this the person has strange experiences. He believes that the experiences are true and behaves in accordance to his beliefs. Thus, his total behavior looks abnormal to others except him.

RECOGNITION OF PSYCHOSIS

The onset of psychotic illness can be either sudden or insidious. Sudden onset (within days all psychotic symptoms evolve in the person) this is characteristic of **acute psychosis, or recent (symptoms evolve days to couple of weeks)** and **insidious onset (symptoms develop over many months or years)** characteristic of **chronic psychosis**. Psychotic illness causes CHANGE in personal functioning. The family members and neighbors report that the

individual has become a different person lately. They no longer share or understand the behavior and thinking of the ill person.

The more severe cases of acute psychosis are easy to recognize, as their behavior is grossly disorganized such as excitement, withdrawal, slowness, suspiciousness, sadness or any other abnormal behavior. However, mild or moderate cases can be initially missed if they are not examined carefully as part of routine work in the clinic.

Consider the possibility of psychosis under the following situations:

- When someone is reported to have excitement, violent behavior or socially unacceptable behavior.
- When someone is talking excessively or does not talk to anyone at all.
- When someone expresses repeatedly bizarre somatic symptoms; eg. My intestines are rotting, my brain is burnt, my liver is missing.
- When someone has stopped working without any clear reason.
- When someone complains repeatedly that others are trying to harm him, planning to kill, or doing magic.
- When someone has sleep disturbance for few weeks.
- When a person has stopped taking interest in personal dress and appearance.

WHAT TO DO AFTER THE DIAGNOSIS

Having identified a person with schizophrenia the next step is to evaluate whether you can manage him or refer to a psychiatric centre.

Referral is advised in the following situations :

(i) **Suicidal risk:** Here the person, because of disturbed thinking and feeling, has shown a tendency to end life by talking about it or attempting it. This patient should be treated at a centre with hospitalization facility.

(ii) **Danger to others:** This is mostly seen in those with acute disturbances in the form of excitement or in those with severe degree of suspiciousness, persons carrying weapons to protect self or when there

is a danger of losing control and harming others. Treatment is to be carried out in a hospital after giving initial treatment.

MANAGEMENT

Most families and relatives of a person with mental illness are perplexed with the sudden inset of change in the behavior of their relative. It is very common for them to feel fearful and apprehensive because of disorganized behavior. The disorganization can be shocking and at times embarrassing to the relatives. Since the ill person is not amenable to any advice or suggestion from the family members, they generally try to physically restrain the person to prevent any problems. Tying his hands and legs with ropes or chains is usually the most common form of restraint used by the family to control excitement. This step aggravates the patient's behavior as the individual feels more threatened and a vicious circle of excitement-control-excitement results.

General measures

An excited patient is brought to the clinic physically restrained and the methods used by the family members can be very harmful to the person at times. The doctor should do the following in such situations, (i) talk to the patient sympathetically to understand his experiences (ii) listen to the family members and allay their fears, (iii) remove restraints (if the excitement is not severe and the danger of immediate harm to others or patient is not there - in all cases restraining should be avoided unless the person is very violent), if the patient is very aggressive or violent, sedate him with 2 mgs of lorazepam or 50mgs chlorpromazine IM , (iv) ensue adequate nutrition and hydration (excitement can easily exhaust a person), (v) keep harmful objects and drugs out of reach of the ill person, and (vi) meet the patient and the family frequently for assessment, treatment and support.

Specific measures

A. Acute schizophrenia (less than 6 months)

Drug treatment can effectively control the psychotic symptoms and consequent behavior disturbances in the patients. The drug to be used is

CHLORPROMAZINE. Chlorpromazine (CPZ) is available as tablets of 25mg, 50mg, 100mg, and 200mg. 100mg tablet is most economical for use.

The initial dose of CPZ should be dependent on the degree of disturbance. For example, for persons with acute excitement requiring restraint a dosage of 300mg per day (in three divided doses) is most appropriate. For those with disturbance of lesser intensity, dosage of 200–300mg is used (in three divided doses).

Initially the response to the drug is often dramatic so much so that symptoms subside within a short period of time. If the symptoms persist, increase the dose to 600mg per day gradually. If this dose of medication does not control symptoms in 12 weeks, the patient should be referred for further evaluation as inpatient in a psychiatric center. Continue the medication prescribed by the doctor after discharge from the hospital and encourage the patient to see the specialist at least once in six months.

Most patients respond to 300mg daily dosage. The improvement is seen in decrease of abnormal symptoms and gradual return to normal routine activities. As the treatment progressess the ill person sleeps better, talks more relevantly and takes interest in the family and friends, expresses less of the abnormal ideas and does not show ununderstandable behavior.

Table 3. Improvement in symptoms after treatment

Week	Improvement of symptoms
First week	Sleep, appetite
Second week	Anger, excitement, over activity or withdrawal
Third week	Emotions
Fourth week	Thought disturbances

The same dosage is also indicated for patients who are brought with extreme degree of withdrawal and other symptoms associated with it. Such patients respond very well to Resperidone in a dose of 4-6 mg per day. Start with 2 mg per day and gradually increase the dose so as to reach a dose of

6mg per day depending on the need. However, if Resperidone is not available, Chlorpromazine in the above doses should be given.

The commonest cause of recurrence of symptoms after a period of remission is discontinuation of medication. **This is related to the fact that family members and patient tend to think that restoration of normalcy in behavior is indicative of cure.** Most often this is not true**. Other reason for discontinuation is** mistaken belief that they are ' sleeping medicines' and is habit forming. This belief needs clarification by education about the nature of the illness and mechanism of action of the drugs. The phenothiazines do not cause dependency irrespective of the duration of its use. Similarly, the family members should avoid either overprotection or rejection. They should understand the nature of illness and learn to interact with the patient in a appropriate manner.

Table 4. Guidelines during interview of the patient

What you should do	What you should not do
1. Listen to the patient carefully	1. Do not argue with delusional ideas or try to convince him that his beliefs are wrong
2. Acknowledge his difficulties and distress	2. Do not laugh or ridicule him when he says some thing which is funny to you.
3. Be flexible about the interview and follow up contact	
4. Tell him that his beliefs are not true	

It is advisable to **follow up** the patient, initially, once weekly and later on when the symptoms have remitted, either once fortnightly or monthly.

From the time of beginning of improvement, the drug needs to be continued for another **8 - 12 weeks** at the same dosage. Following this , the dosage of the drug can be gradually reduced by 50mg every 2 weeks to stop the drug after a total treatment of 6 months. Some patients need longer period of treatment with medicines. In case patients relapse after stopping

drugs, restart medication in the same dose as in past. Similarly, if the patient develops psychotic symptoms while decreasing medication, the dosage should be maintained and the help of specialist should be taken for further management.

Patients refusing oral medication

Chlorpromazine is available as a parenteral preparation. In an acutely excited patient CPZ 50 mg can be given intramuscularly. It is best given in the gluteal (buttocks) area as deep IM injection. If following CPZ 50 mg IM, patient is not calm; it can be repeated at six hourly intervals to a maximum of 200mg.

If parenteral medication is used in the first few days as primary treatment because patient refuses oral medication, injection CPZ 50 mg can be given every 6 hours till the person is manageable and starts taking oral medication. It is best to switch over to oral drugs as soon as patient is cooperative.

Side effects

Chlorpromazine and other phenothiazines are safe drugs but can produce hypotension. It is advisable to record the blood pressure of all patients on chlorpromazine. Evidence of liver damage is the only contraindication for use of chlorpromazine.

It is important to be aware of and look for side effects of the drug when a patient is started on phenothiazines (Chlorpromazine, Resperidone). The commonest side effects and their management is considered under Chapter X.

Doctor can refer an acute schizophrenic under treatment to a psychiatrist in the below mentioned situations.

1. Excitement is not controlled within **48-96 hours** in spite of using 600 mg of chlorpromazine per day.
2. Person has associated physical problems like hypertension or diabetes.
3. Recurrent and severe side effects (dystonic reactions) occur in spite of taking appropriate measures.
4. Suicidal tendencies.

5. Persistent symptoms after 12 weeks of treatment with 600mg of chlorpromazine.

Regular drug administration is one aspect of the management of schizophrenia. Rehabilitating the patient is equally important for the patient as the symptoms start disappearing in response to treatment by engaging the individual to do some work regularly. The family members involvement is very important.

MANGEMENT OF LONG STANDING CASES OF SCHIZOPHRENIA

Two out of every 1000 adults in the community irrespective of urban, rural or tribal location suffer from schizophrenia. Most of these persons may have psychotic symptoms like hallucinations or delusions persisting even after months or years have passed by since the onset of illness. In addition, they usually have problems like extreme slowness in activities, disinterest in work, lack of emotional feelings for family and friends and inability to take responsibilities in addition to oddities in behavior like muttering to self or laughing to self. They seem to live in a world of their own. Often such patients may have disrupted family life in the form of divorce, separation, etc. They also find it difficult to hold on to regular jobs.

These persons can also be helped by treatment. The usual drug is chlorpromazine and the dosage is 150-300 mg per day in divided doses. The length of treatment is longer than 6 months. Some persons need to take them all their life to remain well. Along with drugs these persons should be helped to become accepted by the family and society. Finding them simple jobs to rehabilitate them goes a long way in the treatment (Chapter X).

In situations where long-term medication is needed, another phenothiazine FLUPHENAZINE DECANOTE is useful. This is an INJECTABLE drug. It is available as 25 mg per one ml. This drug needs to be given only once in 2 or 4 weeks, since it is a long acting drug. The drug should be deposited deep intramuscularly. Injecting the drug into the fat tissue is not beneficial and some result in abscess formation.

Patients with chronic schizophrenia should be on maintenance medication for varying periods of time. The most important aspect of maintenance

medication is the use of minimal effective dose with minimal side effects. On an average our patients need maintenance dose between 100 to 300 mg per day.

In chronic schizophrenia, after use of 6-9 months of drugs the dosage of the drug (oral) or the frequency of the injectable drug can be reduced gradually. In some, the drugs can be discontinued while in others it has to be continued for many years.

1.2 MANIC DEPRESSIVE PSYCHOSES

This type of mental illness is also called 'Affective psychosis' because the primary abnormality in this illness is one of 'affect' (affect = emotion, mood). The disturbances in mood occur both in quality and quantity and ranges from extreme sadness to extreme happiness. The mood disturbance occurs in episodes of either happiness (**mania**) or sadness **(depression).** These episodes can also occur alternatingly when the illness is called manic-depressive psychosis (MDP). In between episodes the person remains normal. Each episode lasts for few days to few months and the period of normalcy lasts for few months to several years. A person may get only attacks of mania or only attacks of depression or both alternatingly. By and large recurrent attacks of depression is the commonest psychoses that occur as alternating attacks of mania and depression (MDP).

Kamal, a 28-year-old clerk, has been talking excessively, for the last 2 months concentrating less and less on his work. He is cheerful, jovial and unduly happy for no obvious reasons. He has become boastful these days and claims that he can do any type of job quite easily without any training. He is friendly and helpful even to people whom he does not know. He talks about various subjects very confidently. He has very ambitious plans for future.

On enquiry his relatives report that he disturbs every one at home because of his interfering behavior. He doesn't sleep at night and keeps doing something or the other. He talks endlessly and gets easily irritated if he is advised or if things don't go the way he wants. He is impatient and restless. He has been spending money excessively. On talking to the patient it was observed that he shifts from topic to topic very soon and cannot concentrate

on any one topic. He gets easily distracted and tends to be irritable. He says that he has special abilities and talents and he can perform various tasks better than others.

This is a typical example of a person with a diagnosis of **'mania'**. The important clinical features are **extreme happiness, increased talk and motor activity and high degree of irritability. Refer to the power point slides for information about differences between depression and mania.**

These symptoms may be very much increased in severe cases of mania. In such cases the talk may become irrelevant and ununderstandable, the person may become violent and the condition may be indistinguishable from a schizophrenic excitement. He can be a danger to himself and others. Untreated mania generally lasts about 3 months after which there can be spontaneous recovery. The frequency of episodes is highly variable–a person can have several episodes during a year or he may have only one or two episodes throughout the lifetime.

Rani, aged 38 years, a married housewife has 3 children. She is found to be slow and withdrawn for 3 months. She was a very efficient housewife but now she gets tried very easily and finds it difficult to complete the routine household tasks. She is disinterested in her own appearance and looks dull and dejected. She was found to be worrying. She occasionally cries. She complains of generalized weakness and fears that she is suffering from some incurable illness. On talking to her, she tells that the future is really hopeless. She feels her current situation is due to the bad deeds done in the past. She wakes up quite early, by 3-4 am and finds it difficult to go off to sleep again. She feels most miserable at this time and has entertained the idea of leaving the house, or committing suicide. Many days she feels better as the day progresses. She believes that death is the only solution to her problems.

Rani, is suffering from 'Depression'. The important **clinical features** are, sadness without any reason, disinterest in everything, sleeplessness, (early morning awakening) and changes in social functioning. In many cases, in addition to some of the above symptoms multiple bodily complaints will be present. In fact, the bodily complaints may be the only presenting complaints. Such persons go from doctor to doctor undergoing repeated investigations without any lasting relief. Some depressives hear voices

telling them that they are bad and useless and the future is hopeless. They may also firmly believe that 'curse of god' is the reason for their illness or death is the only solution for their problems. While most depressives are withdrawn and retarded, some, especially women in their menopausal age, may be agitated and restless in addition to being depressed. They may also have extreme degree of anxiety. This is called **'agitated depression'**.

The other common complaints reported by depressed patients are poor appetite, constipation, lethargy, tried feeling throughout the day. **PERSONS WITH THE ABOVE TYPE OF DEPRESSION NEED TO BE TREATED ON AN EMERGENCY BASIS. IT IS ESTIMATED THAT ONE IN TEN SUCH PERSONS END THEIR LIFE BY SUCIDE WITHOUT PROPER TREATMENT.**

Depressive disorder

Depressive disorder is the most common disorder, affecting about 5% of the adult population at any given point of time. One of ten cases in a general hospital outpatient clinic or general practitioner's clinic can be this disorder. Depressed mood, loss of interest, fatigability and diminished activity are the important and common symptoms. Other common symptoms are:

a) Reduced concentration and attention

b) Reduced self-confidence and feelings of inferiority

c) Feelings of guilt and worthlessness

d) Pessimistic views of the future

e) Disturbed sleep

f) Diminished appetite and sexual functioning

g) Death wish, suicidal ideas/attempts

Most of the patients present to the doctor with somatic symptoms and biological function disturbances like headache, backache, chest pain, weakness, easy fatigability, insomnia, lack of appetite or sexual inadequacies. Thus there is a need to look for the depressive features by asking direct questions like 'How is your mood? Are you happy? Are there worries that bother you?'

Assessing the severity of depression:

1) Enquire for psychotic symptoms: Find out whether the patient is having delusions (of guilt, suspicion, hallucination (blaming voices).

2) Check whether the patient had similar episodes of depression or mania in the past.

3) Evaluate the risk of suicide: Check whether the patient is serious about his death wish or suicidal ideas. Has he planned to commit suicide and how? If he has already made an attempt to commit suicide, check the severity of the method used.

4) Check how much the patient has neglected his basic needs and daily routines. Based on this, you can decide whether the patient is suffering from severe depression, moderate depression or mild depression.

An individual with a **mild depressive episode** is usually distressed by the symptoms and some difficulty in continuing with ordinary work and social activities, but will probably not cease to function completely.

An individual with a **moderately depressive episode** will usually have considerable difficulty in continuing with social work or domestic activities.

In **severe depressive episode** the sufferer usually has considerable distress or agitation, unless retardation is a marked feature. Loss of self-esteem or feelings of uselessness or guilt are likely to be prominent and suicide is a distinct danger.

Management

1) **Severe depression with high suicidal risk:** Patients with these problems are an emergency. Refer the patient to a psychiatric center. Prescribe required sedation (Diazepam 10–20 mg/day) as an initial measure.

2) **Depression with a few psychotic features:** Suicidal risk is low. Put the patient on Amitryptaline or Imipramine 75 mg at bedtime. Chlorpromazine 100–200 mg at bedtime. Build up the dose to the therapeutic level and continue the meditation for 6 months.

3) **Mild Depression:** Patient needs psychological management (See section on Treatment of Mental Disorders).

Management of suicidal risk: The following measures should be taken:

i) Inform all the family members and others regarding the risk.

ii) Tell them that suicidal ideas are part of the disease and they should not blame the patient.

iii) The relatives should keep a vigil on the patient all through the day and night.

iv) Patient should not be left alone even for a few minutes.

v) Potentially harmful objects that can be used to harm self should be kept away from the patient (weapons, poison, medicines etc.)

vi) Patient should be engaged in activities, which make him comfortable and involve him with others.

vii) Arrange for urgent psychiatric help.

MANAGEMENT OF MANIA

The treatment is chiefly by the use of drugs, namely use of antipsychotic drugs (Chapter X). When the patient is brought in a disturbed and excited state requiring physical restraint, such patients can be managed with injection **Chlorpromazine 50 mg IM or Lorazepam 2mg IV**. Excitement can be controlled in a short period of time. These drugs can be repeated every half an hour till the patient is sedated or to **a maximum of 200 mg CPZ or 8 mg of Lorazepam** is reached. Once the patient is sedated and under control, oral drugs can be started.

The basic drug for treatment of MANIA is CHLORPROMAZINE. Initial **oral dose** is 300-400 mg daily in divided doses. The clinical condition is reviewed after three days. If there is no improvement with the above dosage, drug is increased upto 600 mg daily in divided dosage. With this dosage most patients show improvement. At times, if there are short periods of excitement, and injection Chlorpromazine 50mg, i.m. can be used.

With the above treatment, initially (first week) patient's sleep improves and the activity level decreases. Gradually in the following weeks the grandiose ideas and other features of mania disappear. Refer power point slides to understand how improvement occurs after treatment.

The daily dosage is maintained for at least 4-6 weeks after adequate response has been noticed. Following this the daily dosage is gradually decreased by 100 mg every week over 4 to 6 weeks. If the patient relapses during drug withdrawal, restart the medication in a dose of 300-400 mg and maintain for another 2-4 weeks before reduction of dose is attempted. Sudden stopping of the drug is not advisable except when the daily maintenance dosage is less than 100mg per day. After the initial week, major part of the drug can be given as a single night dosage, which decreases the side effects. Sudden withdrawal of medication can cause withdrawal dyskinesias. These are involuntary movements.

The commonest side effects complained of are drowsiness and extrapyramidal symptoms. Drowsiness decreases with suitably decreasing the dosage of the drug or choosing a drug with less sedative effect. Management of extrapyramidal symptoms is given chapter X.

Referral to a specialist is advisable under the following conditions:

(i) Excitement is not controlled with the above dosage in 48 to 96 hours.

(ii) Severe side effects causing distress to the patient.

(iii) Symptoms of mania persisting after 6 weeks of continuous treatment.

Please note that rehabilitation is very important for persons with affective disorders. As in the case of schizophrenia, patient should be encouraged to return to work and assume, gradually, a normal routine.

TREATMENT OF MDP – DEPRESSION

Antidepressant drugs are absolutely essential to treat depression because they restore the levels of neurotransmitters **(decreased in the case of depression)** to normal levels in the brain. Therefore, the primary treatment for depression is the use of anti-depressant drugs. There are a number of antidepressants available in the market (Chapter X). **There are no differences**

in the effectiveness of the different drugs. They differ with respect to occurrence of side effects and sedation. Generally, it is best to be familiar with one or two antidepressant drugs and get experienced in adjustment of the dose and management of side effects. The basic drug of choice is **Imipramine**. This comes as 25 mg and 75 mg tablets.

The starting dosage of the drug is 75 mg per day given in single bedtime dose. All antidepressants take about 14-21 days to provide relief. It is best to repeatedly educate the patient about this to prevent stopping use of drugs prematurely. Initially, Imipramine can produce mild and short lasting side effects like dryness of mouth, constipation and blurring of vision. Patients should be reassured that they are temporary and self-limiting in nature. Doctor should review the clinical condition at the end of two weeks and if the side effects are not disturbing, should increase the dosage to 100 mg per day (maximum dose is 150 mg/day).

With the above treatment, patients will gradually show improvement. The initial change will be in sleep, appetite, and decreased feelings of sadness. Doctor should continue the treatment in full dosage at least for 12 weeks after complete improvement of all symptoms has been noticed. Following this, the drug can be gradually reduced by 25 mg per week over 6-8 weeks. If there is a recurrence of the symptoms when decreasing the dosage, the earlier dosage is given and maintained for 4 weeks prior to initiating reduction. The total duration of treatment is 3-6 months after complete remission of all depressive symptoms **or for a period of one year from the onset of depressive symptoms.**

Referral to a specialist is indicated in following situations:

(i) When at the initial evaluation suicidal risk is considered high (such patients respond to ECT quickly),

(ii) When there is no improvement in depression with 4-6 weeks of full dosage of antidepressants,

(iii) Recurrence of depression is associated with other physical problems like hypertension, neurological, cardiovascular problems,

(iv) When there are multiple psychosocial problems associated with depressive episodes. All these situations require more detailed evaluation as well as management plans.

1.3 Acute Psychosis

In India, a number of studies have shown that about 10% of all persons with psychoses belong to the category of Acute Psychosis. This condition is characterized by (i) an acute onset (within 2 weeks), (ii) presence of associated stress, and (iii) a typical syndrome characterized by rapidly changing and variable clinical picture. Complete recovery usually occurs within 2 to 3 months **and most often within a few weeks or even days. In view of these features, the treatment of these disorders is very effective and the duration of treatment is not as long as in schizophrenia.**

ORGANIC MENTAL DISORDERS

These disorders are caused directly by damage to the structures of brain. The underlying disease may be in the brain itself or may be in the other parts of the body.

1. **Disorientation** to time, place and person. Patient is unable to identify a place, to recognize relatives, cannot tell the time of day, day of week or month.
2. **Poor comprehension:** Patient is not able to understand the spoken or written language, cannot follow simple instructions like "open your mouth", "show your tongue", "touch the left ear".
3. **Poor calculation:** A person who was good in calculation and money matters loses the ability and may start making simple mistakes.
4. **Memory deficits:** Initially the person may have difficulty in recalling the immediate events, later on recent events and still later on in the illness the past events. Patients forget personal things like pen, footwear or purse, and keep searching for them. They can forget the conversations they had with friends, forget the article which they wanted to buy in a shop. They may not be able to recollect the names of friends and family members. They may forget the way in a familiar surroundings and get lost.
5. **Changes in personality:** There may be a change in the manner in which the person reacts to a situation or in the life-style. A person who was careful with money matters may become a spend thrift. A person who

used to be calm and even-tempered, becomes irritable and quarrels with everybody. A person, who had hardly any friends, now tries to socialize with many. Persons may start talking about sex openly without bothering about who is present, or show decreased control over sexual or aggressive behaviour.

6. **Emotional liability:** The affected person can show severe emotions like crying, laughing, intense fear for a short period and rapid changes in emotions.

7. In addition to the changes in higher mental functions like concentration, orientation, memory, intelligence, the affected person may have other symptoms like excess anxiety, depression, shame, suspicion, apathy, and exhibit socially embarrassing behaviours.

8. **Self-neglect** and absence of awareness of the same: Affected person can forget to button the trousers and remain unaware of it. They may put the shirt inside out. They may soil the clothes but not be aware of it.

Some of the patients can develop neurological symptoms or deficits like fits, paresis, paralysis, ataxia, incoordination, involuntary movements of the limbs, etc.

Causes of organic mental disorders are already mentioned.

The following sections covers two of the most common syndromes.

DELIRIUM

It is an acute organic mental disorder, often seen in primary health care setting and general hospitals. The important clinical features are acute onset of confusion and disturbances of higher mental functions due to diffuse brain dysfunction. It has a brief but fluctuating course. It is usually reversible. Rajendra, aged 35 years, known to be dependent on alcohol presents with behaving very strangely since morning. On examination, he is not recognising his wife and mother and say that they are strangers probably the agent of his enemies, who want to kill him. He is extremely fearful, tries to hide himself in a corner. He pleads for protection. Often he shouts and screams. His hands are trembling. He sways from side to side unable to stand erect. On enquiry

the family gives the story that he had his last drink only yesterday. He is suffering from 'Delirium Tremors'.

Sita aged 30 years, who is a known diabetic, takes insulin injection by herself. She is brought to emergency with a compliant that since morning she is talking irrelevantly. She says that she is being haunted by devils who are abusing her. She is trying to chase them away. She is restless and attempts to runaway. Her daughter can hold her with difficulty. On inquiry, she took insulin injection that day and did not have here breakfast. She is having auditory hallucinations to which she is referring to as 'devils'. This is a form of delirium.

Delirium is commonly associated with

1. Withdrawal state in individuals who are dependent on alcohol, opium, and other substances.
2. Hyper pyrexia: High fever associated with viral fevers, urinary tract or respiratory tract infection, sepsis etc;
3. Electrolyte imbalance: Sudden fluid/blood loss due to diarrheas, dysenteries, vomiting, bleeding, leading to electrolyte imbalance;
4. Post-epileptic attack period : When a person has an epileptic attack, following the cessation of convulsions, there can be confusion, automatic behavior or aggression which last for a few minutes to an hour.
5. Head injury: Following head injury, the victim may have the features of delirium;
6. Hypo- or hyper-glycemia.
7. Hepatic, renal, cardiac insufficiency states.
8. Vit B1, B6, B12 deficiency.
9. Post- operative states.

Person before developing delirium, may have prodromal symptoms like day time restlessness, fearfulness, hypersensitivity to light and sound. Disorientation to time is the first clinical symptom. Illusions and

hallucinations in all sensory modalities and fleeting (quickly changing) delusions are commonly present. The clinical picture fluctuates, becomes more and more severe at night or early morning. Automatic instability in terms of pallor, flushing, sweating, irregular heartbeats, nausea, vomiting may be present. The affected person may become either suicidal or homicidal in response to the psychotic experiences.

Delirium usually remits in one to two weeks. In a few cases, it may lead to dementia. Depending on the underlying cause, if not treated, some cases may die (10–30%).

Management

In the management of delirium, identification of the cause becomes a vital step. A good physical examination and basic investigations like blood, urine, x- ray skull and chest can lead to the diagnosis. If there are no facilities in PHC, the doctor has to immediately refer the patient to a near by bigger hospital, and provide symptomatic management.

1. Evaluate signs of dehydration and if they are present give I.V. fluids and make the patient to take fluids orally unless the patient is semi unconscious when you have to put Ryle's tube and feed him.
2. Examine for a full bladder, if full, facilitate emptying.
3. Record the temperature and if the patient is having high temperature take a decision regarding prescribing antibiotics and/or antipyretics. Advice the attendants regarding the use of tepid sponging and giving adequate fluids.
4. If the person is semi unconscious or unconscious see that airway is maintained free.
5. If the patient is restless and exhibiting psychiatric symptoms the drug of choice is Haloperidol 5mg to 20 mg a day either IM or orally in 2 or 3 divided doses. If you do not have Haloperidol, use small doses of chlorpromazine 100–200 mg in 2 or 3 doses.

Do not sedate the patient in case of delirium following head injury.

6. Keep the patient in a properly lit (room should not be either too bright or too dark), well-ventilated room. Avoid crowding of relatives. Introduce your/anybody's arrival and what you are going to do to the patient to avoid fear in the patient. Do not carry instruments in hand, which may be dangerously misinterpreted by the patient.
7. Allow one familiar person to nurse the patient. Avoid frequent changes in nursing and other hospital staff.

Dementia

Raju, is a 65 year old male. His family members report that he is forgetful, looses his way when he goes out of the house. They report that he is unable to find his way to the toilet or the kitchen in the house. They report that his behavior has changed over the last couple of years. He demands food repeatedly even though he completed his meals. They find it very difficult to convince him that he has eaten. He is unable to recognize relatives, grand children by their name. He tends to make mistakes in calculation and often loses money when he goes shopping. Lately, he is unable to remember the day of the week, month of the year and time of the day. Raju was in good health and he did not suffer from hypertension or diabetes. Examination reveals disturbances in immediate and recent memory, calculation, judgment and inability to understand that he has memory problems.

Dementia usually starts gradually and is progressive. It is generally irreversible. It is more common in people who are 60 years and above.

The clinical picture consists mainly of progressive deterioration of intellectual functions like memory, intelligence and judgement, changes in the personality (behaviour pattern), quick fluctuations in emotional responses (liability) and stereotyped repetition of words or actions. As the illness progresses, patient is unable to take care of his personal needs and hygiene. He may develop symptoms like restlessness, sleeplessness, wandering tendencies and suspiciousness.

Patient may also develop neurological symptoms like fits, weakness or paralysis of the limbs or body, difficulty in speech, vision and difficulty in motor movements coordination.

Common causes of dementia

1. Diseases of central nervous system like Alzheimer's disease Huntington's disease, Parkinson's disease, etc.
2. Infections like tuberculosis, syphilis, AIDS and cryptococcal meningitis.
3. Repeated injuries to brain (e.g. boxers)
4. Cardiovascular; Cerebral hypoxia and anoxia, multi infarct dementia which is seen in the case of diabetes mellitus, hypertension.
5. Encephalopathy as a result of organ failure (liver, kidney)
6. Endocrine and metabolic diseases (e.g. thyroid)
7. Chronic abuse of alcohol or other toxic substances
8. Brain tumors
9. Deficiency states like cyanocobalamine deficiency.

About 10% of dementias are treatable and reversible. Examples are Syphilis/Tuberculosis of brain, Hypothyroidism, deficiency states, normal pressure hydrocephalus and slow growing brain tumors. Such conditions occur before the age of 65 years and they are referred to as presenile dementia.

Management

These patients often need investigations and should be referred to a hospital. Treatable conditions have to be treated after full investigations. Counselling the family members regarding the nature of the illness is essential. Looking after patient's nutritional and hygienic needs are very important. Tablets of chlorpromazine in smaller dose, 25 mg to 100 mg or Diazepam 5-10 mg can be given when sleeplessness, agitation are seen. Antiepileptic drug has to be given if the patient is having epilepsy. Any person who develops psychosis for the first time after the age of 50 years, should be examined in detail for the possible evidence of organic psychosis.

Highlights

- Major mental disorders or psychoses are serious mental disorders
- They are very disabling and burdensome illnesses
- Very effective medicines are available to treat these disorders
- With appropriate and early treatment nearly 7-8 out of every 10 persons can make symptomatic recovery in 12 weeks
- Major mental disorders include psychosis, depression and mania
- If there is an identifiable cause for psychosis then the illness is referred to as organic psychosis
- Majority of patients do not have an identifiable disease and therefore referred to as functional psychosis
- Based on the onset of symptoms psychosis can be classified as acute or chronic psychosis
- Psychotic illness is characterized by disturbances in thinking, emotions and perception
- Mania and depression is predominantly a disturbance of emotions

Commonly asked questions on major mental disorders

Causes

1. What is reactive psychosis?

Psychotic disorder precipitated by stress in the individual's life. Stress can be in the family, work situation, financial matters or any other event. The content of stress is usually reflected in the psychotic symptoms.

2. Etiology of Schizophrenia

The cause of this disorder is not clearly known as yet. What is known is that neuro chemical substances like dopamine is increased in certain

areas of the brain. In general, causes of schizophrenia can be attributed to multiple factors like biological, social, psychological and environmental. In brief the cause of this illness is multi-factorial in nature.

3. **Which are the drugs, which can cause Acute Psychosis?**
Drugs that can cause acute psychosis are : amphetamines, phencyclidine, cocaine, cannabis, isoniazide, cimetidine, corticosteroids and several others.

4. **Is acute psychosis common in families where one member suffers from psychosis?**
The chance of developing psychosis is less than 10% per cent if no one in the family suffers from psychotic disorder. This risk is slightly more if one or the other member in the family has psychosis.

5. **Is acute psychosis heredity?**
Acute psychosis is not genetically inherited illness.

Diagnosis

6. **Can children develop acute psychosis and how do they differ in signs and symptoms between adults**
Children can suffer from acute psychosis. They also experience hallucinations, delusions, disorganization of speech and have biological disturbance like their adult counter parts. The symptoms are not well differentiated like adults. To make a diagnosis in children is not difficult based on behavior disturbances.

7. **A young lady develops acute psychiatric problems. She has multiple symptoms like crying spells, dullness, withdrawal, sleeplessness, hearing voices of people abusing her verbally, she thinks that her family members will be dead soon. Is this acute psychosis?**
This young lady has symptoms of depression and psychotic symptoms. This kind of a picture is characteristic of severe depression with psychotic symptoms. Weightage should be given for depressive

symptoms and antidepressants should be started. In addition antipsychotic drugs should be given till the psychotic symptoms disappear. The antidepressants should be continued for at least a period of one year.

8. **A middle-aged male was brought to the clinic with history of feeling very fearful in the night. He says that some one comes to kill him by suffocating his throat. He also feels very shy and suspicious in public places. All these symptoms have started about one week ago. Is this a case of acute psychosis?**

These symptoms are not suggestive of psychosis because the description does not provide information on hallucination, delusions or disorganized speech. The information suggests that the person has anxiety symptoms and this could be related to stress in his life.

Differential Diagnosis

9. **How to differentiate between acutely psychotic patients and patients who behave like psychotics (malingering) to seek attention?**

Stressful events in one life can be the cause for psychosis (Ref Q1). Malingerers are persons who have developed certain symptoms during the process of criminal investigation (stressful event) or a girl could evade marriage proposal and malinger. In other words feigning sickness to escape punishment or taking up certain responsibilities.

10. **Kindly throw light upon grandiosity of mania and grandiose delusions of schizophrenia and whether treatable.**

Delusion of grandeur or ideas of grandeur is a psychotic symptom. It is a symptom associated with elation or excessive happiness, over activity–this constitutes mood disorder (Mania). If the same symptom is associated with incoherent speech and inappropriate emotional expression or understandable anger or suspicion it is Schizophrenia. There is no need to call a condition schizophrenia or mania in your practice. Just psychosis as a diagnosis would be sufficient.

11. Which organic disease causes acute psychosis?

Any acute infection of the CNS can resemble acute psychosis. Similarly, drug induced states, head injury and alcohol withdrawal can resemble acute psychosis. In organic conditions sensorium is usually affected but in functional acute psychosis sensorium is intact.

12. A middle aged individual develops acute psychosis on the back ground of chronic alcohol use

This condition is referred to as alcohol induced psychosis. This is usually seen during withdrawal state. Psychotic symptoms develop 36–48 hours after the last drink. The individual has clear consciousness and has predominantly hallucinations and fleeting delusions. They are not aware that they are ill.

13. How to differentiate hysteria from acute psychosis

Hysteria is an emotional disorder. Sudden onset of symptom on the background of stress is very characteristic. The person is not distressed about the symptom, he/she is very indifferent to the state of ill health. There are hallucinations or delusions. This is however not feigning of illness like in malingering to escape responsibility or punishment. It is an unconscious need for attention. Usually manifests as convulsions, or sudden loss of speech or blindness. Physical examination does not corroborate with symptom.

14. A young lady was brought to the PHC with acute onset of loss of speech. She was very dull and did not mingle with family members or relatives. She kept to herself all the time and neglected personal hygiene. What is this condition?

This illustration could have the following conditions to be considered.

1. This symptom on the background of stress – hysteria
2. No stress - consider depressive illness
3. If there are delusions, hallucinations or disorganized behavior consider psychosis

15. **A young man develops psychosis and he refuses medication. His family members feel helpless because he says he does not have any problem and refuses to come to the hospital. Is it possible to administer medication to such a person without his knowledge to help the family cope with his problem? Is it right to do so?**
It is very important to understand that no one should be administered medication without his/her knowledge. It is possible to explain to the person that he is ill and needs medication. Also tell him that he will be admitted to the hospital if he refuses medication. This is done by seeking treatment order from the Magistrate. Generally patients agree and start taking medicines. In few weeks time they get better and come back for follow up and apologize for their behavior.

16. **Management of acute confusional state in a PHC. What are the organic conditions that should be ruled out clinically**
    - Post epileptic confusion – history of epilepsy

1. **(Action to be taken – Treat with Benzodiazepines)**
    - Acute encephalitis – fever , headache , seizures and vomiting
2. **(Action to be taken – Refer immediately)**
    - Acute metabolic disorder- Diabetes or icterus
3. **(Action to be taken – Refer immediately)**
    - Acute dehydration- acute GE
4. **(Action to be taken- Dehydration by IV infusion)**
    - Sub arachnoid haemorrhage – acute headache and meningeal irritation.
5. **(Action to be taken- Refer immediately)**
    - Drug intoxication – history of drug use
6. **(Action to be taken- Injection Lorazepam 2 mg IV stat or injection Diazepam 10 mg IV stat or Inj Haloperidol % mg stat)**
    - Subdural haematoma – head injury

(Action to be taken – Refer immediately)

17. **Does the management of acute psychosis differ when etiology of stress is present and when it is an idiopathic.**
The management of acute psychosis precipitated by stress and that without stress is the same.

18. **How is the response with Quitipine in treatment of schizophrenia compared to olanzepine?**
All anti-psychotic medications available for use today is comparable to each other with respect to its efficacy in symptom reduction. The side effects like, extra pyramidal symptoms are seen more frequently with chlorpromazine, haloperidol compared to others. Resperidone in a dose of 6mg or more also causes EPS, olanzepine causes increase in weight gain and increases the risk of diabetes and quitipine has less side effects but clinical efficacy is less.

The newer drugs are more expensive compared to conventional drugs, but the efficacy is the same. The drugs that will be available for use in the PHC will be chlorpromazine and fluphenazine and these drugs can be safely used and gives very good results. If patients are not benefited with these drugs, they should be given newer drugs. It is important to recognize that cost is a prohibiting factor and we all should learn to accept to work with constraints and this is the reality.

19. **Please tell us something about puerperal psychosis and management?**
Psychotic illness seen 28 days after delivery was referred to as puerperal psychosis in the past. This is not different from acute psychosis described earlier. Psychosis like phenomenon seen in this period can be associated with puerperal sepsis, cortical vein thrombosis, in which case headache, vomiting and seizures can occur in addition to disorganized behavior or altered sensorium.

20. **How safe is antipsychotic drugs in pregnancy? What is the line of treatment of psychosis in pregnancy?**
Ideally all drugs should be avoided during pregnancy because nothing can be safe under the sun to the growing fetus. This not practicable,

because the clinician can not determine whether a lady is pregnant or not in a routine clinical care. The most important period when can cause damage can be caused is the first two weeks of pregnancy. It is a good practice to avoid any drugs during this stage. The most practical alternative to increase safety is to educate young couples to avoid all drugs when they are planning pregnancy. The incidence of congenital abnormalities seen in one hundred live births is 2%. The proportion of congenital abnormalities seen in persons who have taken any drug during pregnancy is also 2%. This evidence suggests that there is no clear difference. However, lithium carbonate, a prophylactic drug used in mood disorders should be avoided during pregnancy and therefore the couple should be advised to stop medication when they have planned pregnancy.

21. Which drug to be administered to an agitated acute psychotic patient who is in labor pain?

A patient who is psychotic during delivery can be a clinical challenge in any setting. The choice of drug depends upon the parity and stage of labor. It is best to refer such patients to secondary care hospital where anesthetist, gynecologist and operation theatre is available. They can sedate the patient with haloperidol and conduct caesarian section to ensure safety of both mother and the new born. Please remember that a pregnant lady with psychosis is high risk pregnancy and it is better to plan caesarian electively rather than waiting till the last minute.

22. What is the treatment for Acute Confusional state? In acute confusional state, if the person has psychosis along with organic disorder, what is the treatment? Is there a need for any antipsychotic drugs in such a case?

Let us take examples of several confusional states -

1. Let us say a person with psychotic illness has an epileptic seizure and he has post ictal confusional state. This person should be given IV Diazepam 10 mg and the confusion will disappear in a matter of hours. This person needs observation for at least 24 hours after

the seizure. If he continues to be confused and disoriented after 24 hours, refer him to the nearest hospital for further care and evaluation.

2. If the person with psychosis is intoxicated with drug like cannabis or alcohol, he should be given 5 mg of haloperidol or 10 mg of diazepam and the person will settle down after few hours or with in a day.

3. If a person has cerebral contusion or concussion due to head injury refer him to the nearest hospital with 5 mg of haloperidol IV because diazepam will cause sleep and it becomes difficult to evaluate the patient.

4. Anti-psychotic medication can be continued after a brief gap after the life threatening condition is treated.

23. Incidence of puerperal psychosis and its management.

The incidence of new case of psychosis occurs at the rate of 3/10,000 population in the community. Out of this a small proportion of fresh cases of psychosis can occur during puerperium. Management is the same as for other acute psychosis. The child can be breast fed during this period. If the neonate is very drowsy (because a small amount of drug can be excreted in breast milk) the child should be fed bottle milk and reverted to breast milk as soon as possible. If there are difficulties further in managing such a case consult your local physician and the district psychiatrist.

24. Drug of choice for acutely psychotic patient before shifting?

Injection haloperidol (10mg IV) or diazepam(10mg IV) or lorazepam (2mg IV).

25. What are the adverse effects of quetiapine?

Weight gain. Good drug for treatment of psychosis in patients suffering from Parkinson's disease. This drug is useful when conventional drugs have failed to resolve psychotic symptoms. Not the first drug of choice in treatment of psychosis.

26. **Pregnancy and antipsychotic drugs and its effect on pregnancy outcome.**

Most anti-psychotic drugs are safe in pregnancy. Ref Q 20 for details. There are specific problems seen as outcome after using anti-psychotic medication. In fact the management of psychosis in a pregnant lady is crucial for the health of the about to be born child.

27. **A middle-aged man develops acute psychosis. He is a known diabetic and hypertensive. What is the management of such a case?**

This means that person is more than 40 years old. Resperidone in a dose of 2–6mg per day or haloperidol in a dose of 5-10 mg is safe to manage. If there are any difficulties, refer the patient to your district psychiatrist or consult for any other help.

Course and outcome

28. **How many persons with acute psychosis develop chronic psychosis in the long run? What are the factors responsible for this?**

Two or three persons with acute psychosis can go on to develope psychosis for long periods of time. Poor compliance with medication, resistant symptoms, non supportive family, family members disliking the patient for one or the other reason, use of drugs like cannabis and alcohol could be some of the reasons.

29. **A person developed psychotic illness and completely recovered from it about 2 years ago. He has developed sadness, cries frequently and talks about ending his life. Can a person develop depressive symptoms after acute psychosis? If so what are the reasons?**

It is possible to develop depressive symptoms after acute psychosis has remitted. If this kind of a picture arises, the diagnosis is mood disorder. Treat the depressive episode with anti-depressants. If there is a relapse of psychosis after anti-depressant therapy such patients need prophylactic medication. Consult the district psychiatrist for additional help.

30. **Can a person recovered from acute psychosis marry? What are the chances of recurrence of psychosis in future?**
A person who has had a psychotic episode need not live alone for the rest of his life. He/she can marry and lead a normal life like any one of us. The person who is getting married should be aware of the problem. He/she should be committed to get the person for treatment in case of relapse. In the present time , psychosis can be very well managed with available drugs and there is no need for any apprehension. Psychosis is like any other illness like diabetes or hypertension, and why should such persons be discriminated. In fact, in psychosis all symptoms will resolve in 12 weeks time and the person can remain well for a long time.

31. **When should a person with acute psychosis resume routine work and other responsibilities?**
Resuming routines should occur after 4-5 weeks or at the most 3 months.

32. **Can a medical officer issue a certificate that a person suffered from acute psychosis?**
Depends upon the situation. If the person wants a certificate for availing leave because of sickness, the doctor can issue the certificate like he/she issues for any other illness. If the certificate is for legal purpose or for certification of disability due to the illness, the patient should be referred to the psychiatrist with all the relevant records. Every time a certificate is issued the reason for the certificate should be clearly stated by the person and a copy of the same should be kept in the file.

Commonly asked questions on chronic psychosis

Causes

1. **What is the aetiology of chronic psychosis?**
Refer Q 2 in acute psychosis for the answer. Chronic psychosis is a misnomer. To simply the diagnostic categories of various forms of psychosis, this term is being used. Chronicity is not the characteristic

of the disease condition. It is related to lack of appropriate treatment as early as possible. When we know that 70% of psychotic symptoms resolve within 3 months of treatment with anti-psychotic medication, chronicity therefore becomes a misnomer.

2. **What are the factors responsible for developing chronic psychosis after one has developed acute psychosis?**
Refer to the section on course and outcome in acute psychosis.

3. **Some persons with chronic psychosis improve in a short period of time, but some do not improve despite regular treatment. Is there is difference in the aetiology of these two pictures.**
The current knowledge seems to suggest that there are some differences. There is no clear answer to this issue as yet. But some factors like brain structural abnormalities in certain areas are responsible, in addition to the factors mentioned in the section course and outcome (acute psychosis)

4. **Since both the acute and chronic psychotic disorders are functional disorders what are the biochemical changes that occur in the brain and how does stress or any other external factor affect this biochemical change?**
The most important biochemical change is the increase in the dopamine (neuro-transmitter) in certain areas of the brain. The confirmatory evidence for this is the development of Extra Pyramidal Symptoms after administration of anti-psychotic medication. Extra Pyramidal Symptoms seen in Parkinsonism is due to decrease in dopamine and this is the reason for dopamine supplements in Parkinsonism.

Diagnosis

5. **What is the difference between chronic psychosis and intractable psychosis?**
Intractable psychosis is treatment resistant psychosis. This term is used when more than two types of drugs have failed to resolve symptoms.

Chronic psychosis is the term used to refer to psychotic illness where symptoms are persisting because of lack of treatment. In other words , in the former case the person is resistant to treatment but in the latter case he is untreated.

6. **How to differentiate paranoid schizophrenia from mania with psychotic symptoms?**

In mental health care practice at primary health care level, use of such terminology is not necessary. Use of either acute psychosis (onset with in the last 4 weeks) or chronic psychosis (insidious onset of symptoms over several months or years) is sufficient. As mentioned earlier this is the simplification we have made to help you understand these disease conditions so that you can document in the file after evaluation.

7. **If a patient denies hallucinations or delusions while examination, how to decide whether he is mentally ill or not?**

Their relatives bring most of the persons with mental health problems like psychosis. They do provide information about the changes in behavior of the person. The following behavior needs consideration. Person talking to himself or conversing with imaginary people or arguing vehemently is suggestive of actively responding to hallucinations. A person quarrels with neighbor thinking that the neighbor is harming him or filling the gaps in the door or window with pieces of clothes or some other material to prevent poisonous gas entering his room is suggestive of action taken by the patient secondary to false firm belief that the neighbor is trying to kill him. Based on such behavior it is possible to infer that the person is actively psychotic.

Some patients might be very uncooperative and guarded and refuse to divulge any information but family members are convinced that the patients are behaving in a strange manner. These are some of the ways of understanding that the person is ill. If you are still in doubt, refer him for evaluation by the district psychiatrist.

8. **How to differentiate paranoid schizophrenia from hebephrenic schizophrenia?**

As mentioned earlier, there is no need to use the above diagnostic categories in primary care settings. The drug treatment does not differ because both are long duration psychoses and need treatment with anti-psychotic medication.

9. **A male aged about 60 years thinks his wife (aged 52 years) has illegal relationship with neighbors and whoever talks with her closely. Symptoms duration is about 1 year. His relationship with other relatives is good. The patient complains he can't have his wife alone in home and he won't allow her to do work and asks her to sit in front of him. He doesn't want to go to a psychiatrist for check up. What is the diagnosis, treatment and duration of treatment?**

This man has a false, firm, belief that his wife is not trust-worthy and unfaithful. He suspects that his wife has illicit relationship with other men. This is a psychotic illness and needs treatment. Talk to him and convince him that he needs treatment because he has a brain disorder. If he is very aggressive and violent towards his wife and still refuses treatment he should be admitted in the hospital after reception order from the magistrate. This is a rare kind of mental health problem and if the patient refuses treatment on admission, one cannot force medication on him. In such cases write to the magistrate about his behavior and opine that this might be due to mental disorder. Two medical certificates from two doctors should be submitted to the magistrate and he will recommend observation, evaluation and appropriate treatment by the psychiatrist usually in an institution.

10. **A married lady about 35 years and a mother of girl aged 10 years has been separated from her husband. Since her child's birth (10 years back) she is living with her aged mother. From past 5-6 years she has developed a strange behavior e.g. she starts bathing with water during nights, early mornings or many times a day at home. She is normal with her talk, dress. She sleeps during afternoon and tries to complete other work during night. She does not show any interest in her daughter's studies / any matters. No suicidal tendency. Does she require any medical line of Rx?**

The description of the behavior suggests that the patient has psychotic illness called hypomania. This is a form of psychosis and needs treatment with anti-psychotic medication. Such patients could have had similar episodes or depressive episodes in the past.

Differential Diagnosis

11. Exacerbations in chronic psychosis and how to differentiate this from drug related side effects.

Exacerbation of psychotic illness means the person has psychotic symptoms. Intensity of the symptoms have increased either due to poor compliance with medication or due to some other issue. The exacerbation can have symptoms like restlessness , agitation or withdrawal. Drug induced side affects can cause motor restlessness called Akathisia. Akathisia decreases with reduction in the dose of anti-psychotic medication. This will also improve with addition of benzodiazepines. Increase of anti-psychotic drugs will worsen akathisia.

12. A 20 year old student studying in first year degree was brought with a history of attempted suicide. He was a brilliant student till SSLC. He has performed very badly in his studies over the last two years. Since his marks were low he could not join any professional college. What is the reason for academic decline. Does he have any mental illness?

Most of the persons suffering from psychosis have delusions, hallucinations and disturbances in speech. These are called positive symptoms. On the other hand, lethargy, amotivation, progressive disinterest, lack of emotional reaction and increasing isolation are some symptoms referred to as negative symptoms. About one third of patients with psychosis can present with such symptoms. The above description is suggestive of negative symptoms of psychosis and he needs treatment and drug of choice in such condition is resperidone 2-6 mg per day. Such a person needs to be engaged in all day-to-day activities regularly.

13. **Is it possible for any one to have mental illness without experiencing psychotic symptoms like hallucinations or delusions?**
Yes. Refer to the above answer. They might develop psychotic symptoms later.

Management

14. **Is there a need for genetic counseling for chronic psychosis?**
No.

15. **Is it possible to counsel a person suffering from chronic psychotic disorder?**
Oh, yes it is certainly possible. Counseling means educating the patient about an issue or providing some relevant information about the illness or explaining the cause of the patient's experience. All of these can be done for people suffering from psychotic illness after the acute symptoms have remitted with appropriate anti-psychotic medication.

16. **If anti psychotic medication is administered life long, does it affect the body metabolism?**
No. Some side effects like Tardive dyskinesia can occur. TD is a disorder of movement involving small muscles.

17. **Whether antipsychotic drugs need to be given life long?**
Yes, some patients need treatment for rest of their life. The general principle involved is minimum effective dose.

18. **How to manage persons with chronic psychosis and alcoholism. Does alcohol use worsen the psychosis?**
Alcoholism can impede recovery from psychotic illness. The person should be encouraged to abstine from alcohol. Family members should be educated about poor recovery if alcohol is used regularly.

19. **A 35-year-old male is withdrawn and he refuses to work and his self-care is very poor. He does not have hallucinations and delusions. Does**

he need antipsychotic medication? If so why. What should be done if he refuses medication?

Refer to Q 12 and Q 9 for answers.

20. **What is the role of half way home in the management of chronic psychotic disorders?**

Half way home is a psychiatric facility half the distance from home (not in real terms). It is a recommended intervention for people who continue to have residual deficits like poor social skills, self help skills, communication skills and living skills. The half way home intervention using therapeutic community approach help the individuals gain the above skills so that he can cope with the demands of living with other family members.

21. **Is it possible that a patient who is suffering from chronic psychotic disorder can develop acute psychotic disorder? If possible how do you differentiate the patient whether he is suffering from acute/chronic psychotic disorder and what will be the line of management?**

Person suffering from chronic psychotic illness can develop a RELAPSE. This can happen if he/she discontinues medication or in situations where medication was stopped by the doctor. The management of this condition is discussed in the section below.

22. **How is fluphenazine different from chlorpromazine?**

Fluphenazine is a long acting Depot Injection. It is used as maintenance treatment of chronic psychotic illness. One injection of fluphenazine once a fortnight is equal to 100 mg of chlorpromazine per day. Chlorpromazine is administered orally while fluphenazine can only be given parentally. Antipsychotic medication has a longer half-life. They are administered in once a day dose. Fluphenazine is released slowly and it takes about 36–72 hours to act after the first injection. Chlorpromazine's clinical effects starts after few hours of administration. Both of these drugs produce extra pyramidal symptoms and this can be managed by administration of trihexiphenydyl in a dose of 4 mg per day. Acute dystonic reaction can occur within 24 hours after

administration of chlorpromazine in some individuals while with fluphenazine it can occur after 48 hours. Acute dystonic reaction can be effectively handled with promethazine 25-50 mg intra muscularly. The dystonia will disappear in 30- 60 minutes.

23. **How long to use the injectables in chronic psychotic disorder as a maintenance? Shall we stop oral antipsychotic medication when the symptoms disappear? It has to be withdrawn gradually or abruptly? Can injectables be used along with oral medication?**

Oral medication is started after diagnosis. The starting dose of chlorpromazine is 100-300 mg per day. This should be combined with trihexiphendyl about 4 mgs per day. As mentioned earlier, psychotic symptoms will resolve in 8 -12 weeks of regular intake of medication. Once the patient is stabilized he/she should be shifted to long acting medication like fluphenazine 25 mg IM once in 2 weeks. This regime will ensure approximately drug equivalent to 300mg of chlorpromazine. Shifting from oral to parental drug can be done without any problem and if need be oral chlorpromazine can be combined with depot injections.

24. **Is there a difference in the dose of medication for men and women in chronic psychosis?**

Asians and other non-white people are slow metabolizers of anti-psychotic medication. Generally they need lesser dose of medication compared to the white people. Experience does suggest that women need lesser dose compared to men but there is no clear evidence.

25. **How to manage a patient with schizophrenia who develops depressive symptoms during the course of treatment with anti-psychotics?**

This condition is called post psychotic depression. About one third of patients develop depressive symptoms 6 months after treatment. Add anti-depressant medication (imipramine) in a dose of 75-100 mg.

26. Kindly tell me all the drug interactions that one should be careful while taking anti-psychotic medication.

(a) Chlorpromazine and anticholinergic drugs like trihexyphenidyl and benztropine are usually prescribed to prevent or minimize extra pyramidal symptoms in the patients. This combination can reverse the therapeutic effects of chlorpromazine and also cause additive anticholinergic toxicity.

(b) Chlorpromazine and anti-hypertensive drugs can cause hypotension and postural syncope and therefore should be carefully used or consult a physician if there is need for anti-hypertensive medication.

(c) Chlorpromazine and carbamazepine: Carbamazepine induces microsomal enzymes which decreases the steady state plasma concentration and increased hepatic clearance of CPZ resulting in deterioration of symptoms.

(d) Chlorpromazine and cimetidine: Cimetidine reduces the steady state plasma concentration of CPZ and thus may impair therapeutic effects.

(e) Chlorpromazine and antacids: Chlorpromazine is adsorbed when administered with antacids and the practice of combining CPZ and antacids should be avoided.

(f) Chlorpromazine and fluoxetine even in small doses can cause dry mouth and pronounced orthostatic hypotension.

(g) Chlorpromazine and lithium results in decrease in the plasma levels of orally administered CPZ . This is due to poor absorption of CPZ from the gut and increased metabolism. Combination can cause confusion, disorientation, extra pyramidal symptoms and ataxia.

(h) Co-administration of chlorpromazine and metoclopramide can cause severe extra pyramidal symptoms and acute dystonia.

(i) Chlorpromazine and nictotine: Patients who are prescribed chlorpromazine should avoid smoking. Nicotine lowers the plasma level of CPZ.

(j) Chlorpromazine and orphenadrine: Orphendrine lowers the steady state of CPZ blood levels because of induction of microsomal enzymatic activity.

(k) Chlorpromazine and phenobarbitone: Phenobarbitone decreases plasma level of chlorpromazine

(l) Chlorpromazine and phenytoin: Chlorpromazine increases the plasma levels of phenytion resulting in toxicity.

(m) Chlorpromazine and propranolol: Combination with propranolol can result in increase in plasma levels of CPZ.

(n) Chlorpromazine and tricyclic anti-depressants: Combination with tricyclic antidepressants can result in elevation of both CPZ and anti-depressants levels. Anticholinergic side effects and sedation becomes very marked.

(o) Chlorpromazine and sodium valproate: Combination with valproate results in decrease of blood levels of valproate necessitating increase of valproate to control seizures.

27. **A 48 year old male is on anti-psychotic drugs for the last 15 years. Recently he has developed diabetes. Is there a need to change the drug. What are your suggestions for managing this patient?**
If the patient is on a drug called olanzepine, it should be changed to some other drug like resperidone or haloperidol. If he is chlorpromazine there is no need to change and anti-diabetic drugs can be safely added.

28. **A 30 year old male is on anti-psychotic medication for nearly 10 years. He does not have hallucinations or delusions. He is very lazy and refuses to work and he is not interested in anything. He smokes excessively and frequently fights with his parents for money. Is there any new anti-psychotic medication that will make him motivated to work and develop interest in life? What is the management of such patients?**
There are many drugs available to help such patients. It is best to refer this patient to the district psychiatrist or any institution so that newer

drugs can be tried. Such patients also need activity scheduling and vocational training for a period of time. Once he is reasonably stable , he can be referred for follow up at the PHC.

29. **Management of Bipolar affective disorders in a PHC set up.**

Bipolar disorders are primarily mood disorders. This category of patients has episodic illness. Prophylactic medication like lithium carbonate, sodium valproate and carbamazepine is used depending upon the nature of the illness. It is important to carry out certain tests before patients are initiated on prophylactic medication. Blood levels of this medication should be monitored for some time after the symptoms are stabilized. This is best done in a specialist centre rather than a PHC, since lab facilities are not available. In so far as the management of this condition is concerned treat psychosis with anti-psychotic medication and stop after 6 months. Treat depression with anti-depressants for one year. If the patient has frequent episodes refer him for specialist care.

30. **A 45-year-old patient is withdrawn and tends to be abusive from time to time for no understandable reason. How to manage such patients in primary care clinics?**

This person needs evaluation to start with to ascertain the nature of mental health problem he has. It is important to consider the following condition as differential diagnosis to plan for effective management.

1. If this kind of a clinical picture is present currently with psychotic symptoms for which treatment was given, a possibility of chronic psychotic disorder can be one of the diagnostic groups. If that is the case he should be taken for consultation. Medication should be decided upon only after evaluation and he should be educated that he has mental health problem for which medication is necessary.
2. This kind of a picture can be seen in depressive illness.
3. The third possibility is pre-senile dementia.

31. **Does dose of medication and duration of treatment vary from to case to case or is the duration of treatment and dose standard for all patients suffering from severe mental illness.**

The dose of medication in severe mental illness is same for all patients. Some patients might need lesser dose while others might need a higher dose. Dose of medication is not related to severity of illness. Duration of treatment will however vary from person to person and that depends upon the duration of illness. For information on general guidelines for duration of treatment, please refer power point slides.

If the individual develops relapse after stopping medication , treatment should be restarted.

Course and outcome

1. **What is the prognosis for negative form of schizophrenia and what is the duration of treatment?**

Negative symptoms need both medication and other forms of non drug treatment like vocational training, activity scheduling, social skills training and living skills training. All of these interventions can be done at home using resources available within the family. Duration of treatment is for a long period of time.

2. **Is the course and outcome of chronic mental illness different between men and women?**

The course and outcome of chronic psychosis is known to be better for patients living in developing countries compared to their counterparts in the developed world. In developing countries women recover faster compared to men.

General Issues

1. **What is the role of primary care doctors in management of destitutes with mental illness?**

Persons with severe mental illness are not destined to become homeless. Falling out of safety network of the family, community and the larger system resulting in homelessness is a reflection of lack of treatment

and consequent support for the individual and the family. We all have responsibility to help the mentally ill homeless person recover from mental illness. The role of primary care doctor is to kick start the helping process through the law enforcing agency like the police. They should rescue such persons from the street and produce them before the District Magistrate for reception order. Reception order from the magistrate is a order issued to the institution providing mental health care. Homeless persons are admitted to the hospital after reception order for treatment. The institution relocates the person after recovery from the illness into their family. If the family is not available or traceable, such person should be placed in a safe environment within the state or involve the local NGOs in the rehabilitation.

2. **Is the intelligence affected in chronic psychosis?**
Intelligence is not affected due to severe mental illness. However, attention, concentration is affected in 30-40% of individuals and this deficit is intervenable using various higher mental function-training strategies.

3. **Can a person with schizophrenia lead a normal life?**
Majority of persons with chronic psychosis can lead a normal life like any one of us. Small minorities need some degree of support and supervision and that is dependent of the residual deficits.

4. **Can psychotics marry?**
History of mental illness does not take away the right to companionship or marriage. The person who is likely to marry the person with past history of mental illness should be aware about the nature of mental illness, current deficits in the individual and the medication. Complete transparency about the illness is a must. Many people with past history of mental illness or recurrent episodes of mental illness live successfully in marriage relationship.

5. **Which type of psychosis is dangerous to the community?**
Persons suffering from psychosis are not dangerous in true sense.

Dangerous behavior like suicidal and homicidal behavior can occur and that is clearly related to symptoms. Persistent psychotic symptoms can give rise to behavior like attacking the persecutor more in self-defense rather than an intention to harm the person for gain or any other personal motive.

6. **Can a patient on long-term treatment with anti-psychotics handle machinery or work in high-risk areas where accidents are a possibility?**
Person with chronic mental illness can function efficiently in any area of work. Most of the skills that he/she had will remain intact. Certain degree of alertness and good reflexes are required for the person to handle machinery. This may be temporarily impaired due to drug related side effects like drowsiness or extra pyramidal symptoms. The treating doctor should ensure that the medication should be just sufficient to control symptoms and also have least side effects so that the individual functions to the optimum in the expected roles.

7. **Can climatic conditions have effect on psychosis?**
Climatic conditions like heat and cold have effect on chronic mental illness.

8. **Is it true that creative people have more risk for mental illness compared to non-creative persons?**
Creative persons are known to have higher incidence of mental health problems. Some consider that creativity is a epiphenomena of mental health problems.

9. **Mental disorders exist in the society for long time. These people were treated in mental hospital and why are you changing the approach now. What is need for stressing on mental health care in a PHC when there are so many programs?**
Early treatment for mental disorders have better outcome. Delays in treatment are the most important for chronicity. The most convenient place for treatment is obviously the primary care settings since it is

accessible for people in the community. Care in the community is far more inexpensive compared to treating such persons in the hospital. Treatment in the hospital is known to result in certain problems which can be avoided by care in the community.

10. **Are mentally ill people more prone to physical problems compared to people without any psychotic illness?**
Indeed yes, untreated patients are more prone to these problems. Early treatment has several advantages – better and faster recovery and decrease in physical health problems and increase in longevity.

11. **We can say whether a person with chronic mental illness will bear a child who will develop mental illness in future. If this is so, why should a person get married to produce more burden on the society?**
Mental illness has a genetic cause. The chances are about 10% and therefore there is no need to give undue importance to this aspect. Genetic vulnerability is the susceptibility to stress and therefore attempts to increase competence in these children can result in decrease in incidence. This aspect needs more research.

12. **Name some latest drugs available for the management of chronic psychosis.**
As mentioned earlier, no anti-psychotic medication available at the present time is superior to the others in terms of its efficacy to reduce symptoms. However, side effect profile is different. Newer drugs are known to produce less side effects compared to the older ones but the newer drugs are far more expensive. In public mental health programs one has to measure the pros and cons to make the appropriate choice. It is important to note that economy, efficacy and safety are the key elements that one should consider and the older drugs have all these qualities.

13. **Can psychosis be prevented? What are methods available currently?**
There is no successful strategy as yet to prevent psychosis.

14. **A large number of people with chronic mental illness benefit from visiting temples, durgas and traditional healers. What is their role in mental health care?**

A large number of people seek help from traditional and faith healers because there is no other facility available in the vicinity to seek help from. The traditional healing facility is supportive and the explanation they give about the cause of illness is in keeping with the community's understanding of the problem. Traditional and faith healers have no role in psychotic illness but they can be useful for neurotic illness provided they do not exploit the ill person unnecessarily.

15. **Is there any seasonal variation in psychotic disorders as some have possession disorder during full moon day?**

Psychotic illnesses are not known to have seasonal variation in terms of relapse or occurrence of fresh episodes. Possession attacks can occur at any time, new moon or full moon day or on a particular day of the week.

16. **Are persons living in poverty conditions more prone to develop psychotic illness?**

The incidence of psychotic illness does not differ between the rich and the poor. Poverty can be clearly associated with many mental health problems like alcoholism, epilepsy, mental retardation and emotional disorders (neurosis).

17. **Are psychotic illnesses related to geographical and environmental factors? If such factors contribute to the onset of mental illness, would prophylactic treatment with anti-psychotics be indicated?**

Environmental and geographical factors and its association with onset of mental illness is not clear. When this is the case, there is no scientific rationale for prophylactic use of any anti-psychotic medication.

18. **Role of psychosurgery in the management of severe mental illness?**

There no evidence at the present time that psychosurgery has a role in the management of severe mental illness.

Commonly asked question on Depression

Causes

1. **What are reasons for decrease in neuro-chemical substances in the brain?**

   Neuro-chemical substances like epinephrine, nor epinephrine, serotonin and acetylcholine are known to be decreased in some areas of the brain. It is not yet clearly established as to the specific reason for this change.

Diagnosis

1. **Should depression be categorized as mild, moderate or severe? Does the dose of medication differ in the above categories?**

   There is no need to categorize depressed individuals by the severity of depressive symptoms. The dose of medication does not change with respect to severity. Treatment method may be different if the person is severely depressed (for eg, severely depressed patient may be severely withdrawn and mute, he may be undernourished because of poor intake of food or he/she may be acutely suicidal). Such patients might need in-patient care and if their management is very difficult they might need electro-convulsive therapy. This method of treatment can alleviate depressive symptoms quickly. Subsequently, these patients can be maintained on oral anti-depressant therapy.

2. **Yesterday night the mother of a 22 years old lady came to my clinic complaining that her daughter is not taking food, is not interested in talking to family members and people. Always crying since 3 days. She got married 3 days back. Mother said her daughter is worried about money problems they faced during her marriage. On asking the patient she did not answer anything and started crying. Patient had similar complaints 3 years back. They consulted a psychiatrist. She took drugs for few months and the symptoms subsided. Is it depression? What is the treatment?**

   It is very difficult to comment on the psychiatric diagnosis of this person based on the description of the case. The following possibilities can be

considered in this situation. First possibility is the acute stress and its consequences manifesting as depressed mood and crying spells. The other possibility is the recurrence of depressive episodes. If all the symptoms of depression are present anti-depressants should be started as early as possible.

4. **How to rate the severity of depression?**
Refer Q 1 in diagnosis section of depression.

5. **How does depression manifest in children and is the management same as adults?**
Depression can occur in children like it can occur in adults. Manifestation of depression can be different compared to adults. Firstly, depression as a disease in children can present as behavior problems like disobedience, withdrawal, refusal to mix with other children, refusal to participate in play activities, disturbance in sleep and appetite and some time strange behaviors like destructive behaviors.

6. **What is minor depression and how is it different from major depression?**
There is no need to use terminology like minor or major depression in your practice. If depressive symptoms are present in the individual on almost all the days for at least two weeks, a diagnosis of depression can be made. Refer to the flow chart and cluster of depressive symptoms in the power point slides. If unhappiness, worries and disturbances in sleep are present for many years on the background of life difficulties like problems in marriage, finances, job, relationships, legal problems or any other difficulties, a diagnosis of neurotic depression is made. This type of depression occurs in the individual because of poor coping ability. Anti-depressants are very important for symptom remission in depressive disorder, where as coping and problem solving ability is important for neurotic depression.

7. **What is the difference between endogenous depression and reactive depression?**
Refer Q 6 in the same section.

8. **It is quite common for us to see depressed persons after some bad event in their life. Do they need anti-depressants?**
No. Anti-depressants have no role in such a situation. Listen to them, recognize that their distress is understandable, encourage them to talk to friends and relatives about the bad event, reassure them that reaction to the event is not a sign of weakness and encourage them to carry out all routine activities.

9. **A woman of 64 years gets fits of anger and says she gets very bad thoughts that she cannot tell to anybody and feels very bad about having such thoughts, though she is such a good person. She doesn't want to go to any psychiatrist due to stigma. What could be her disease?**
She is suffering from repetitive thoughts which are her own thoughts, perhaps the content of thoughts may be very disturbing to her. Generally such patients may have compulsive motor activities for example "a person felt that her hands are contaminated with infective organisms and feels like washing her hands repeatedly". This condition is called Obsessive Compulsive Disorder, which is due to decrease in the serotonin in certain areas in the brain. This disorder is a completely treatable condition. The above example could be such a condition. Fluoxetine, a selective serotonergic reuptake inhibitor (SSRI's) is very useful for treatment of such a condition in a dose of 40-60 mg per day taken as a single dose in the morning.

Differential Diagnosis

1. **How to differentiate between chronic psychosis and depression**
Depression is a disorder of the mood, while chronic psychosis is disorder of thinking. Persons suffering from chronic psychosis can have negative symptoms like amotivation, disinterest, decreased energy and slow mental activity, without any depressive features. On the other hand persons with depression have subjective sadness which is pervasive in nature with symptoms like loss of appetite, loss of weight, loss of interest, loss of libido, loss of energy and loss of sleep. Duration of illness in chronic psychosis is for longer period while in depression it is for 8–12 months.

Management

1. **What should be done for the following case? A 30-year-old man was diagnosed as a case of depression and he has not responded to amitryptaline in addition to ECT's.**

   One in five patients with depressive illness may not respond to anti-depressants. Such patients need to be evaluated by the specialists to determine the most suitable anti-depressant medication. These patients need referral to the secondary or tertiary care centres for further management.

2. **What is treatment for repeated suicidal attempts?**

   Repeated suicidal threats or gestures or attempts may be related to poor coping ability of the individual on the background of life difficulties. Such an observation should be taken seriously and should be referred for evaluation by the specialist.

3. **What is management for recurrent depression?**

   Management depends on the number of episodes of depression over a period of time or during one calendar year. This condition can be managed by using anti-depressants for a longer period of time. If the person develops "Manic Switch" anti-depressant induced mood disorder (feeling excessively happy) which is opposite of pervasive sad mood, medication should be stopped and the patient should be referred to the psychiatrist for further evaluation and consideration of prophylactic mood stabilizers like lithium or carbamazepine.

4. **How long should anti-depressant drugs to be taken? Is there a need for maintenance dose?**

   Anti-depressant medication should be taken for one year from the time of starting the drug. Once the depressive symptoms have remitted, reduce the dose to half of the earlier dose and continue for at least 8–10 months. Discontinuation of medication after remission of depressive symptoms can result in recurrence of depressive symptoms.

5. **Any severe side effect of fluoxetine?**

Nausea, vomiting and weight loss are some of the important self-limiting adverse effects of fluoxetine.

6. **What is the treatment of impotency in patients suffering from depression?**

Decrease in sexual drive is a symptom of depression. Anti-depressants will restore the sexual drive as the depressive symptoms remit. If the sexual difficulty persists, refer the patient for further evaluation by the psychiatrist.

7. **Though depression accounts for 60% of psychiatric illness, the diagnosis of depression is easier said than done. Dr. Chandrasekhar, towards the end of the talk on depression, has graded it into mild, moderate and severe forms, the crux of the problem is when to start the treatment i.e., (a) (for symptoms >2 weeks duration) is it ideal to start treatment even if the presenting complaints are of minor nature like insomnia, fatigue, etc because even most of us experience these, or (b) should treatment be initiated only when these interfere with day-to-day activities?**

Depression is a miserable disease. Person suffering from depression struggles to manage and cope with demands of every day life. Even though the tasks are routine and simple, a depressed person is unable to handle it. If depressive symptoms are present for at least two weeks, diagnosis of depression seems certain. There is no need to categorize depression based on severity. Refer Q 1 under depression (diagnosis).

Course and outcome

1. **How does improvement occur after treatment week by week in persons suffering from Psychosis? Is it possible for us to follow such guidelines to monitor treatment in a PHC?**

Ref power point slides on acute psychosis

1. **Can hypnosis cure depression?**
   Anti-depressants are the most effective drugs available to treat depression at the present time. Hypnosis cannot cure depression. Other treatment methods like counseling is to supplement in addition to anti-depressants.

2. **A person is very pessimistic about every thing in his life. How to advise him.**
   Being pessimistic can be a character of the person. It need not always be due to illness like depression. Person could be pessimistic till the depressive symptoms disappear. Help the person understand that he/she should be positive and look at all things in a objective manner. For example all the police personnel are brutal and bad, similarly not all people in the government are corrupt and inefficient. There is both good and bad amidst us and we have to be objective and refrain from being prejudiced about all things.

3. **Is there any injectable medicine for treating depression?**
   No. Injecttable medication is not available for treatment of depression.

4. **Can depression be treated with meditation and yoga?**
   Yes, as a supplement to anti-depressant therapy.

5. **If depression occurred during pregnancy and was treated, what it its effect on the child? Whether it will be a normal child or whether the child is also at risk of developing depression at any age in future?**
   As mentioned earlier, depression in pregnancy should be treated with anti-depressants. Anti-depressants are reasonably safe during pregnancy and lactation. It is also true that there is nothing absolutely safe under the sun during pregnancy. Therefore, clinician will have to weigh the risk of ill health and the effects of drugs and make a choice.

6. **Is there any lab test to confirm the diagnosis of depression?**
Developments in mental health has reached such a stage that with just clinical assessment diagnosis can be highly reliably made based on history and clinical examination in a short period of time. There is no lab diagnostic test available to confirm depression, but tests can be done to demonstrate HPA axis dysregulation. This is not a routine need.

7. **Deliberate self-harm is a crime. Should we inform the police if we see attempted suicide patients?**
Deliberate self-harm is a punishable crime in our country. Legally it is important to report the incident to law enforcing agencies like the police.

8. **Role of narco-analysis in a case of sub clinical psychotic disorder.**
There is no role for narco-analysis in such a condition.

9. **I would like to know more about E.C.T., its indications/contra-indications and adverse effects. If you have video clippings of treating a patient with E.C.T. kindly show it to us.**
Electro-convulsive therapy is an important treatment method in psychiatry. In the past it was extensively used. Its use in clinical practice is gradually decreasing in the last one decade thanks to the development and availability of very safe, economical and effective drugs globally.

PN : ECT is not the first line of treatment for any psychiatric disorder, except in life threatening and emergency clinical conditions like catatonic stupor, depressive stupor and uncontrolled psychotic excitement.

Indication of ECT

1. Treatment resistant depressive illness
2. Treatment resistant psychotic illness
3. Depressive stupor
4. Catatonic stupor
5. Poor compliance with oral medication

Contraindication of ECT

1 Cardiac illness
2 Uncontrolled hypertension and diabetes
3 Raised intracranial tension
4 Cervical spine abnormalities
5 Sensitivity to thiopentone sodium
6 Hepatic disorders and other metabolic disturbances

10. **A patient is diagnosed with depression and he is prescribed anti-depressants. While purchasing the drugs, the pharmacist of the medical store revealed that these drugs were for mental disorders. Then that patient quarreled with the doctor in a major hospital. If this occurs in PHC what to do?**
This is a good example of less emphasis given to educate the patient about the need for medication, nature of the medication and duration of treatment. The patient quarreled with the doctor because he/she did not know that the medication was for depression, which is a disorder of the brain.

11. **Are antipsychotic and antidepressant medication safe in persons who have ischemic heart disease in addition to mental illness.**
Chlorpromazine, imipramine and amitryptaline should be avoided in such patients. Resperidone, fluoxetine and sertraline are safe drugs.

12. **How to treat anxiety and depression in patients who are HIV positive. Does the treatment differ between patients who are not HIV positive?**
Management does not differ when compared to persons who are HIV negative.

13. **A known hypertensive on treatment develops depression. How should this case be managed?**
It is best to manage such a patient with fluoxetine, because IMN or AMN will cause hypotension.

14. **A diabetic and hypertensive develops depression, how to manage such patient in primary care settings? Is it safe to manage such patients in a PHC?**

Management depends upon the physical complications in the patient. If your are in doubt refer the patient to the psychiatrist in your district. Remember, fluoxetine can be a very safe drug in such patients.

15. **What is drug induced confusional state? Kindly mention such durgs.**

A good example, very familiar to you, is atropine toxicity causing confusion. Diazepam can cause confusion in the elderly and hence should be used with caution.

6. Minor Mental Disorders
(Neuroses)

INTRODUCTION

Neuroses are a group of minor mental disorders, characterized by increased emotional responses to life events due to decreased ability to cope with life changes. Unlike in psychoses, persons suffering from neurosis does not loose touch with reality and they are able to carry out routine activities of daily life to some extent. They generally have an understanding of their problems but they are unable to relate problems to perceived ill health. While they do not pose problems to others (in the family, neighborhood etc.), however, they experience varying degrees of personal distress and suffering. This distress manifest as multiple aches and pains. Their ability to cope with routine household responsibilities, work and other usual social situations though disturbed to varying extent, distress in them does not disable the person completely. The disability caused is generally related to the degree of personal suffering experienced by the individual.

The basic and predominant features of neuroses are mental tension and worry. All people get tense or worried from time to time especially when they face with difficult problems. However, they are able to cope with the situations and overcome their tensions or worry with passage of time with support from family members, relatives and medical professionals. If the tension, worry is too much in intensity or prolonged in duration, they tend to interfere with the person's sense of well-being and disturb the normal functioning. Many persons with neurosis basically have feelings of inadequacy and inferiority (lack of confidence), which makes them to perceive common every day problems and difficulties as threatening. This constantly produces tension and worry and these individuals prefer to avoid facing these problems, ultimately resulting in a multiplicity of physical or psychological complaints (symptoms).

Majority of individuals with neuroses have stress factors (eg mental retardation in one child, or alcoholism in the husband) either precipitating or perpetuating the symptoms. The stress can be in the form of a disturbance

in relationship with a person, a family quarrel, an unhappy marriage, and difficulties at work, persistent financial problems, serious illness in family or a death in the family.

It is important to recognize that all individuals cannot escape from suffering due to some degree of mental tension, unhappiness. They experience symptoms in the presence of problems of every day life, at one time or the other. However in the case of the persons with neuroses, these tensions, worries, unhappiness and the consequent symptomatology become part of their life style, leading to constant feelings of insecurity and a need for support from others. The exact clinical presentation of neuroses can markedly vary from one person to another. Some examples will illustrate these problems.

Lakshmi is 30 years old. She is married for the last 8 years but is childless. Since two and half years she has difficulty breathing and chest pain. In addition, she complains of constant burning sensation in the chest and abdomen. At times she experiences thumping of the heart during which she has intense fear, cannot sit in a place and wants careful examination and investigation. The doctors have reassured her repeatedly that her heart is perfectly healthy. In spite of this, Lakshmi continues to have problems and often visits her family doctor, seeking good medicines to relieve her distress. On further enquiry lakshmi admits that her husband has been talking about second marriage because she could not conceive.

Raju, 22 years old, is a tailor by occupation. He has general weakness, easy fatigability and pain in the legs for over a year. The tonics and injections given by various doctors whom he has visited during the past several months have not helped him. He thinks that his nerves have become weak and doctors have not been able to find out the reasons for it. He has severe financial problems. He is not able to meet all the needs of the family members. He is worried that he will become weak and disabled.

Savitri, is a 30 year old housewife. Since last few months she is unable to do any household work, feels weak and tired most of the time and complains of heaviness of head, pulling sensation in the neck, back and limbs. She is unable to eat properly and has difficulty to get sleep. She, as well as others

in her family, believe that the cause for all her problem is her tubectomy operation. She repeatedly requests the health workers, who persuaded her to undergo the operation and the PHC doctor, for good 'tonic injections'.

Lakshmi, Raju and Savitri suffer from Neurosis. Their distress is associated with problem of childlessness, financial difficulties, and family planning operation respectively. Their distress is clearly related to poor coping and not related to any identifiable physical illness.

Aetiology: Generally, biological, psychological and socio- cultural factors are considered to be relevant in the causation of neurosis. While it is believed that hereditary and constitutional factors can play a role in the causation of neurosis, their exact role has not been clearly identified. Different theoretical models exist for the description of the psychological causation of neuroses.

Childhood experiences in the form of faulty learning, improper personality development due to pathological family and interpersonal relationships and faulty parental models have been associated with the development of neuroses in adult life. According to the theories of a very eminent psychiatrist, Sigmund Freud, who developed a treatment method called 'Psychoanalysis' the basic cause of neurosis is the individual's failure to harmonize inner desires, impulses and reality situation; causing pressures and conflicts. These conflicts are generally resolved in the mind by certain mechanisms known as **defense mechanisms.** When these defense mechanisms either fail or become inappropriate, neurosis results. It is well known that, in addition to the above psychological factors, socio-cultural factors like socio-economic status, race, religion, and rapid social changes due to technological advances and changes in value systems are responsible for high prevalence of neurosis and also its presentations.

Generalized Anxiety Disorder

The predominant feature of this disorder is a constant feeling of uneasiness, vague tensions and apprehension with anxious anticipation of danger (when there is no real threat or danger). This anxiety state is often associated with various symptoms like tightness and beating in the chest, empty feeling in the stomach, shortness of breath, inability to concentrate, difficulty in making decisions, forgetfulness, disturbed sleep, nightmares,

poor appetite, chronic mild diarrhea, giddiness, weakness, excessive symptoms sometimes appear in episodes. They may appear suddenly (any where any time without any precipitating factor) or may appear in specific situations or in relation to specific objects.

1) **Panic disorder:** Sudden, unexplained attacks of anxiety / fear (fear of losing control, going mad, heart attack, sudden death, etc.). Symptoms suddenly build rapidly and last for a few minutes.

2) **Phobic disorder:** The sufferer develops intense irrational fear of a specific situation , (for eg. public places or objects, for example fur or tuft of hair), which normally presents no real danger, and actively avoids the object or situation. The sufferer knows that his fear is absolutely silly and there is no reason for fear but still he cannot help avoiding the object or situation. Symptoms and signs of anxiety appear, if they even attempt to approach the feared object or situation. The common feared situations or objects include leaving home, crowds, public places, pet animals, speaking in public, entering closed spaces like lift, etc.

Symptoms of anxiety can be present continuously for months. The patient may present with various bodily symptoms like headache, chest pain. etc. On enquiry patient reports having nervousness, worrying, poor concentration and memory, restlessness and other features of anxiety.

On examination, patient shows signs like restlessness inability to sit without moving, looks anxious, tremors of the extremities, tachycardia, increased blood pressure, and cold clammy extremities. In chronic anxiety states, the above symptoms and signs fluctuate in their intensity causing remission and exacerbations.

The pharmacological management of anxiety is by the use of a minor tranquilizer like diazepam. The dosage range of 5 mg to 15 mg per day is given in divided doses. Reassurance and counseling about the situation along with minor tranquilizers relieve most of the symptoms of anxiety. In patients with panic attacks use of anti-depressant drug like imipramine 75 mg to 150 mg/day can give relief. Refer the patient to a psychiatrist, if he is

not improving in 6 to 8 weeks of continuous treatment. (see chapter X for further details)

Dissociative (Conversion) disorder

In this condition, patients develop typical symptoms of known physical illnesses without an evidence of any organic pathology. The illness usually helps the individual to escape or avoid a threatening or stressful situation. The stress or threat need not always be external. It may arise from the addition to avoiding stress, may also help the individual to fulfill certain needs. They help the person to draw attention of significant others in the family and community and gain their support. These symptoms can be seen as a way of communicating distress, expressing problems or recording protests in a helpless situation.

In majority of the patients the symptoms are physical, either motor, sensory or visceral. In a few cases, the symptoms could be purely psychological. These symptoms can mimic any known physical illness but detailed examination does not reveal any physical illness. The commonest **sensory** symptoms are, anaesthesia, parasthesia, (either absence or abnormalities in sensation), blindness or deafness, either partial or complete. The commonest motor symptoms are paralysis of various parts of the body, fits of various types and other involuntary movements.

The usual **visceral** symptoms are vomiting, belching spells, hiccups, coughing spells, difficulty in breathing. In many cases, the anxiety and concern the patient has for his symptoms or illness are less than the actual or apparent seriousness of the symptomatology. Very often, more than the patient, it is the relatives who express excessive concern. The psychological manifestations of Dissociative disorder are: being possessed by evil spirits, God or Goddess; unexplained loss of memory for specific events (amnesia, fugue); attacks of un-responsive spells.

The following points help you to make a diagnosis of Dissociative disorder.

- Acute, dramatic onset of symptoms, which appear in front of people. These attacks never occur when the patient is alone or during sleep.

- In spite of the so-called disabling symptoms, the patient does take care of his basic needs (like food) and does not injure self.
- There is always a threatening life event (like examination, marriage, quarrel, loss, etc) or a situation, which is perceived as stressful by the patient.
- The symptoms can be precipitated by strong suggestion.

Management involves removal of the hysterical symptoms with suggestion and psychological support. Minimal attention should be given to the symptoms. Identify the problem by talking to the patient and family members. Improve the communication among the family members and patient. A physical examination should always be carried out to rule out the possibility of any physical illnesses.

To prevent the relapse of dissociative symptoms, it is important to identify the stress and help the patient to discuss the same and to cope with the situation. (See chapter on Treatment of Mental Disorders, for psychotherapy)

Sexual dysfunction

Sex is one of the basic needs of human beings. But because of lack of sex-education, majority of our people have many misconceptions and fears about normal sexual activities. They hesitate to take help from doctors, since talking about sex is a taboo in our culture. Persons who have problems in the sexual area may present to the doctor with the symptoms of anxiety, depression or vague physical symptoms. Only after developing good rapport patient may accept the presence of sexual problems.

1. 'Sexual Neurosis' arising out of 'Masturbation and / or loss of semen'

Many young men consult their doctors with symptoms like weakness, inability to concentrate, poor memory, sadness, lack of interest, sleep disturbance, etc., and request for a good tonic. On examination, doctors find them physically normal. When the doctors ask these individuals what is bothering them, they hesitatingly tell that they are in the habit of masturbation, or they have nocturnal emission. They attribute all their symptoms to loss

of semen and request for some powerful medicine either to stop the act of masturbation or to restore the 'damage' done by the 'loss of semen'. There is belief among people that masturbation is bad for health and loss of semen leads to loss of potency. The practice of masturbation is often associated with feelings of guilt and fear about impotence. Any changes in the health, due to other psychological or social or environmental causes are erroneously attributed to masturbation. Often these young persons do not feel like consulting the doctor because of fear about their perceived 'weaknesses'. They fall prey to self-styled 'sex healers' who thrive by exploiting and perpetuating the ignorance. This situation is also contributed by the unwillingness or hesitation of doctors to care for people with matters related to sex. **Many do not know that nocturnal emission is a natural phenomenon and is harmless.** Masturbation by itself does not have any deleterious effects either on the body or the mind. Masturbation can however, cause a problem indirectly. An individual burdened with misconceptions, excessively worries over it as the cause of his symptoms (which are due to some other causes) and suffers because of the excessive worry. Masturbation can also be an expression of some other problem like excessive boredom or doubt in one's own sexual potency. Though by themselves, masturbation and loss of semen are harmless, the associated fear and guild can cause damage not only by worrying about them, but also by leaving the real psycho social causes of the presenting symptoms unattended.

Ramesh, an adolescent boy is due to appear for 2nd PUC exams. He is slightly below average in academics. His parents have high expectations regarding his performance in the exams. He developed aches and pains, weakness, fatigability, lack of interest, forgetfulness, poor concentration. But, he does not relate these symptoms to the fear of the possible outcome and consequences of the forthcoming examination. Incidentally, he has been masturbating, feels guilty about it and fears terrible consequences because of it.

These cases can be provided help by the following measures. First, identify the clinical syndrome (viz., depression, anxiety) by detailed enquiry for other clinical features. Secondly enquire and identify the basic psychosocial stressors in the life of the individual. Thirdly, educate, and

reassure the patient about the symptoms being unrelated to masturbation. Finally, counsel the patient and his family about the basic casual factors namely high expectations in studies in the case of Ramesh. Symptomatically, minor tranquilizers can be used for 4-6 weeks.

2. Sexual inadequacies

Some patients can present with premature ejaculation, partial or erectile difficulties, lack of sexual desire, lack of sexual satisfaction. They would have sought help from self-styled quacks and got exploited by them. In many cases the underlying anxiety disorder or depressive disorder may be the cause of sexual inadequacies. Ignorance, misconceptions and guilt complicate the picture. They have to be reassured and properly educated. Treatment is required for the underlying anxiety or depression.

In married patients, both the husband and wife should be counseled initially individually and later on together. The drugs, which are sold in the market for these problems, are not better than placebos. Therefore, it is better not to prescribe them and focus on education.

3. Psychiatric aspects of contraception

Reproduction is one of the important and basic functions of life. Naturally any attempt to control or stop this function can generate some amount of apprehension in an individual. Sometimes there may be some complications (both organic and psychogenic) with the use of family planning methods. Individuals can get into conflicts with the age-old beliefs and the advantages of a limited family. If a family planning method is forced on the individual without preparing them well to accept it, it can lead to problems.

It is common experience of many doctors that many individuals report a wide range of symptoms starting from vague aches and pains to impotence, after undergoing permanent family planning operations like tubectomy or vasectomy. They may blame doctors or the method used for prevention of child birth for their difficulties.

Sexual difficulties are the most commonly reported complaints following vasectomy. In our country, on an average 10% men reported various degrees of sexual inadequacies like poor erection, decrease in desire and sexual

frequency based on clinic prevalence of such problems. The psychological symptoms reported are irritability, depression, nervousness, lack of concentration, vague aches and pains, discomfort and inability to do hard work. Similarly, a large number of women report development of menstrual, sexual and psychological symptoms following tubectomy operation.

As a consequence of **induced abortion,** it is observed that women present with symptoms of guilt, regret, depression and anxiety. About 20-30% of subjects complain of various kinds of physical, sexual and psychological symptoms after contraceptive methods. These symptoms may arise out of

(i) **Personality factors**

(ii) **A form of social protest when decisions are taken not by the individual but by others.**

(iii) **The family planning method becoming a very easily available reason to attribute for a lot of other problems in their life.**

With **oral pills,** it is estimated that 8 to 30% of women report psychological symptoms like nausea, giddiness, vomiting, general malaise, burning sensation, headache, insomnia, decreased sex desire, etc, as a result of the effect of the hormones. In all these situations, doctors have a vital role to play. Providing education, clarification of misconceptions, giving emotional support and being available to understand their needs are important. Good motivation, effective and simpler contraceptive methods, prompt and timely attention to side effects, regular follow-up, will be of help. **A good doctor – individual relationship is important to help these individuals.**

Highlights

- **Neurosis is a very common diagnosis in general medical setting.**
- **One out of every four patients presenting in primary care settings have diagnosable mental health problems.**
- **Most of these patients present with aches and pains as the most important spontaneously reported complaints.**

- Evaluation reveals a cluster of symptoms that can be diagnosed as anxiety, depression or conversion disorder.
- Counseling is the most appropriate and effective treatment for such patients.
- Medication like minor tranquilizers should be given for 4-6 weeks only.
- Educating the patients about the emotional nature of the problem is very vital.

Commonly asked Questions on Neurosis

Causes

1. **What is the etiology of neurosis?**
   Neurosis or minor mental disorder is an emotional disorder. The person shows exaggerated emotional response to living difficulties. His/her emotional distress is related to decrease in coping capacity. Stress and the inability to cope with the situation can result in release of adrenaline, noradrenalin and cortisol in the body.

2. **Are there any biochemical changes in their brain for such a disorder?**
   There are no neuro chemical changes in the brain like in psychosis or depression. That is the reason for emphasizing more on counseling for such patients rather than pharmacological interventions.

Diagnosis

1. **How to differentiate hysteria from malingering?**
   Both hysteria and malingering are acute behavioral changes in the person on the background of a life event. Hysteria can manifest as convulsions, acute loss of vision, deafness, mutism or acute unresponsiveness with out alteration of consciousness. This symptom suggests a physical disorder but examination does not reveal any physical illness. This kind of presentation is a direct expression of psychological conflict in the

person. These symptoms are not under direct voluntary control of the individual. On the other hand, malingering is to feign an illness and development of abnormal illness behavior with intent to deceive. Hysteria is more common in women compared to men. The incidence of hysteria is however decreasing with better literacy, financial independence and empowerment in women. Malingering is common in special population like people involved in crime or convicted prisoners or undertrail prisoners.

2. **A 30-year-old female is brought to the out patient as she gets possession attacks. Please teach us how to manage this patient in the PHC.**
Possession attacks are temporary alteration in the integrative functions of the consciousness or identity of the person. Specific internal mental factors like memories, ideas, feelings, perceptions are lost to conscious awareness and cannot be recalled voluntarily. Possession attacks may be considered as a psychological defense as it provides a way of suppressing unpleasant , painful and anxiety provoking thoughts.

It is important to note that symptom removal is not the most important need in terms of intervention. Encourage the patient to talk about her/ his life in words and sentences as much as possible in her/his own time. Do not make fun of such persons or threaten them to behave them selves. Do not do anything actively when the person is having a possession attack like giving an injection or making the patient inhale pungent odors. Gradually patients start talking about their problems. Subsequently, counsel them and teach them coping and problem solving strategies. There is no need for any specific medication except minor tranquilizers for 1 - 2 weeks which should be tapered off during follow up.

3. **Can both anxiety and depression co-exist? If yes, what would be the diagnosis?**
Yes, most often anxiety and depressive symptoms can coexist. There is no compulsion to give a specific diagnosis of anxiety-depression. Just a diagnosis of neurosis is sufficient.

4. **A male patient aged 26 years had family quarrel regarding land dispute and nobody supported him. He was told that if he went on quarreling he would become mad one day. So, on some day he saw a mad person roaming on the road and he got the feeling that he would also become like him one day. That thought of madness is not going from his head.**

   This is a case of mental health problem characterized by repeated thoughts in his mind that he will become mad (obsessive ruminations) or the other possibility is constant anxiety that some thing bad will happen(madness). The diagnosis may be OCD or Neurosis.

5. **Almost all women who undergo Tubectomy or laparoscopic sterilization complain multiple aches and pains constantly. Is there any psychological reason for this kind of a behavior?**

   This is a very common experience of most doctors. There is no physical basis that explains such a set of symptoms after tubectomy or vasectomy. The aches and pains are a reflection of psychological distress taking the form of physical symptoms. Examine the patient and look for anemia and correct it if the patient is anemic. Reassure the patient that simple health promotive intervention cannot cause any ill health. Also encourage the patient to talk about her/his concerns after the operation and clarify misconceptions. Accept that distress is real and reassure that there is no reason for undue concern.

6. **A 20-year-old female complains of suffocation while she is asleep and she also has dreams where she is threatened of being killed.**

   The description of the above case is suggestive of nightmares. Nightmare almost always occurs during Rapid Eye Movement sleep and at any time in the night. Persons who experience this have a very good recall of the experience. Nightmare is characterized by long frightening dreams in which the person awakens frightened. There is no specific treatment for this except that benzodiazipines may be of some help. Persons who have such experiences have benefited from regular relaxation exercises.

On the other hand night terror is characterized by sudden awakening with intense anxiety, common in children. Individual does not remember the experience, occurs during Non Rapid Eye Movement sleep, often occurs during the first one or two hours of sleep. It has been found that awakening the child prior to night terror episodes may eliminate such experiences for long periods of time. No specific drugs need to be used for this problem.

7. **A 20 year old girl got married one month back and went to her husband's house. She came back to her parent's house the very next day after her first night and now she is not ready to go back to her husband's house. She doesn't have any gynecological problems. Is this a mental illness? What is the treatment for this? Please explain.**
It is very difficult to make any diagnosis with the above information. The following possibilities can be considered. Traumatic sexual experience on the first day of marriage, disillusioned with relationship, forced marriage, aversion to sexual relationship and lastly inability to adjust and cope with the new change.

8. **Tell us about dreams and nightmares and treatment.**
Refer Q 6 in this section.

9. **A girl aged about 20 years, 10-15 minutes after sleep, experiences a sort of suffocation as she feels someone sitting on her chest and trying to throttle her and sometimes she would hear a voice threatening to kill her. What is it and how to treat such cases? Please advice.**
Rerfer Q 6 in the same section.

Differential diagnosis

1. **Obsessive-compulsive disorder belongs to which group of Psychosis?**
Obsessive Compulsive Disorder is not a psychotic disorder. It is characterized by repetitive thoughts, impulses, images that are intrusive and causes intense anxiety and distress to the individual. The person recognizes that these are his own thoughts but is unable to suppress or control it. Compulsions are repetitive behaviors like hand washing,

keeping things in an order or checking or mental acts like praying, counting, or repeating words silently. The person feels driven to perform mental or motor activities in response to obsession.

2. **Somnambulism is sleep walking, is it a functional, psychogenic or hysterical problem?**

Somnambulism is also called as sleepwalking. It is a disorder of sleep and occurs during the Non Eye Movement sleep. This is very common in children and disappears with age. The condition is characterized by complex motor activity like leaving the bed and walking without full consciousness, brief lasting in nature and the person is unable to recall this experience. Benzodiazepines are useful for this condition.

Management

1. **How do breathing exercises help persons with anxiety? What is the mechanism of action?**

Breathing exercises fine tunes the autonomic nervous system and therefore reduces the anxiety.

2. **A known diabetic feels very fearful that he might lose his eyesight and fears that his kidney might be damaged because of diabetes. How should one manage such a case?**

The example illustrates anxiety symptoms secondary to onset of physical illness like diabetes mellitus. Good control of diabetes can avoid the complications and the person can lead a normal life. Reassurance, clarification about the complication and suggestion to maintain diet and good compliance with medication can be very useful to handle such problems.

3. **Is anti anxiety drugs habit forming? How should we then manage anxiety in primary care without drugs?**

Anti-anxiety drugs can be habit forming if used indiscriminately and without supervision. It is very important to educate the patient about the potential of habit formation on using the drug. Symptomatic relief

from anxiety with drugs is for a very short period of time. Usually for 4-6 weeks and the drug should be tapered and stopped. Practice of relaxation and clarification of distortions in thinking in the individual is a very safe and effective management strategy.

4. **Are anti depressants necessary for patients who have multiple aches and pains on the background of chronic physical illness? If so when this medication should be started?**
   It is important to understand what is chronic physical illness and its severity. Complications of chronic physical illnesses like diabetes or rheumatoid arthritis can present as myalgias. If the patient has depressive features in addition to multiple aches and pains with persistent sleep disturbance, anti-depressants are indicated for several months.

5. **Can acute psychiatric emergencies be managed in primary care settings. Is counseling enough in acute neurotic disorders or do they need hospitalization.**
   Acute neurotic disorder like acute hysteria, dissociation and adjustment disorders can be very safely managed in primary care settings. It is important to understand that such symptoms occur on the background of stress. Strong reassurance and helping the person understand the relationship between stress and symptoms is very crucial. This should always follow a good physical examination and feed back of the outcome of examination to the patient. Encourage the patient to talk about his/her difficulties and provide time for the same. If the above measures are not helpful, consider referral to the hospital.

6. **Is it possible to treat neurosis with only counseling?**
   Counseling is a very effective and most appropriate treatment of choice for neurotic disorders.

7. **Management of acute hysterical attack in primary care settings?**
   Refer Q 5 in the same section.

8. **What is role of placebo in the management of neurosis?**
Placebo has no role in the management of neurosis. Encouraging the patient to talk about personal problems is very important and linking symptoms to stress, coping and problem solving should be given its due place rather than placebos.

9. **What is dhat syndrome and its management.**
Dhat syndrome is characterized by multiple aches, pains, tiredness, lack of confidence, decreased energy, mental and sexual weakness as a result of loss of semen, either through masturbation, sexual indulgence or loss or semen in the urine (misinterpretation of passage of urates and phosphates which gives a smoky colour to the urine). Dhat syndrome is commonly seen in young males. In women the features of tiredness, weakness and easy fatiguability is attributed to vaginal discharge. Like dhat syndrome, vaginal discharge is considered to be result of loss of vital elements or fluid (Dhatu), which is presumed to deplete the body of energy thereby weakening the various organs of the body. The syndrome is a culture bound phenomenon specifically noted in Indian culture. It is clear that mental distress is related to misconception about physiological aspects and matters related to sexual practice. Strong reassurance and education about physiological functions and sex education can result in dramatic improvement. Benzodiazepines for a brief period of time (1-2 weeks) can be helpful. It is important to engage the person in discussion and clarification of his/her doubts periodically.

10. **If depression and anxiety disorder exist in the same patient, what is the line of treatment?**
Anxiety and depressive symptoms both occuring at the same time is very frequently seen in primary care and general practice settings. In addition to counseling regarding psychosocial stress, minor tranquilizers like alprozolam, anti-depressants like amitryptiline can be useful. Remember it is given only for 4-6 weeks. Practice of relaxation is extremely useful and beneficial to the distressed individual.

11. **What is the treatment of hysterical fits?**
Evaluate the patient and give a feed back about the findings on physical examination. Educate the family and the patient that conversion reaction (Hysterical fit) is psychological conflict presenting as bodily symptom. It is important to mention to the family members that the patient is not deliberately feigning an illness. Encourage the patient to talk about her mental distress in words and sentences rather than the symptom. Benzodiazepine for one week is sufficient. Emphasizing that the patient should try to talk about her personal problems and understand the relationship between problems in her/his life and symptoms is very essential.

12. **Management of hysteria in PHC level.**
Refer Q 10 in the same section.

13. **Generalized anxiety, which results as increased working of autonomic nervous system, doesn't actually get cured with a short-term treatment with benzodiazepines. It keeps recurring in prone patients during their life span. Can low dose beta-blockers over a long period be tried? What harm if low dose benzodiazepines are continued if patient benefits?**
Benzodiazepines and beta-blockers help in controlling anxiety symptoms. Long term use (benzodiazepines) can be habit forming. This is an undesirable outcome and therefore medication should be stopped after 4-6 weeks. Teaching the patient other methods to control anxiety can be very beneficial. In addition to this, learning about coping and problem solving strategy is very vital.

14. **Importance of relaxation exercises in anxiety neurosis and depressive neurosis.**
This is a very simple breathing exercise that can be practiced any where and any time. This involves taking a deep breath and exhaling after few seconds. This should be done for at least 10 – 15 minutes at a time several times a day. Patients experience dramatic relief from anxiety symptoms.

1. **Some people get possessed while they visit the temple. Are they, mentally ill and do they need treatment?**
   These people do not need any treatment and they are not mentally ill.

2. **What are the complications in a person who has chronic anxiety disorder? Are there any complications at all?**
   Chronic stress reactions like anxiety can result in development of many physical disorders. This is very well known and the stress is a major factor for the epidemiological transition we see today. Non-communicable diseases are more frequently seen today and constitute a major public health problem compared to epidemics. Chronic anxiety disorder can cause cardiac complications like mitral valve prolapse.

3. **An 18 year old girl has bed wetting. Kindly teach us how to manage such as case?**
   Bed wetting usually remits by the age of seven. If it persists beyond 7 years of age, emotional problems may be the underlying cause for such a phenomenon in addition to other causes. The urologist should address physical causes like small blader capacity. This 18-year-old girl should be referred to the urologist for further evaluation. Remember bed wetting is not only a symptom of emotional problems but also a symptom of other structural abnormalities of the uro-genital tract.

4. **Is Bhanamathi a fact or false.**
   Bhanamathi is believed to be true in some areas in the state, particularly, in north Karnataka. It has been extensively investigated both by social scientists and mental health professionals. It has been found to be a misconception of the people that practice of exorcism and black magic can cause ill health and there is no scientific evidence for the same. Bhanamathi as a phenomenon has been used by the local traditional healers, faith healers and tantricks to exploit ignorant people in some areas in the state.

5. **Doctors in the periphery encounter many cases of minor affective disorders like neurosis, hypochondrias, depression, anxiety states, etc. Is it not advisable for such videoconferences to concentrate on such disorders rather than discussing on major affective disorders for which a peripheral doctor has smaller role to do?**

This is indeed a very relevant and valuable question. We agree with you that neurosis (common mental disorders) and depression forms the major proportion of the mental health problems in the community and these problems are more common in primary health care settings. We have given due importance to that, and the proof for that is the Manual of Psychotherapy for Doctors, in addition to Manual of Mental Health Care for Primary Care Doctors. We have added psychosis and epilepsy because they are very disabling and burdensome conditions and the good news is that they are very easily treatable in primary care settings. This program is designed to sensitize primary care physicians about the priority mental disorders and impart knowledge and skills to treat such patients with basic essential drugs. If you recall the first sessions, the minimal mental health care means the following – **identification of psychosis and initiating anti-psychotic medication; identification of depression and initiating anti-depressant medication; identification of epileptics and initiation of anti-epileptic medication; identification of neurosis and initiation of appropriate counseling; identification of mental retardation and initiation of sensory motor stimulation, self help skills, academic skills and vocational training ; and lastly identification of persons with alcohol abuse disorders and educating them about ill effects of alcohol and detoxification for those with withdrawal symptoms. All of these tasks can be done easily in the primary care settings despite time constraints.**

6. **Can hysteria lead to psychosis?**

No.

7. **How the doctors should deal with stress in their busy schedule?**

Stress is a major source for concern for all concerned at the present time. Stress is a inevitable part of our life. Initiation of changes towards healthy

life styles likes regular exercise, diet, relaxation, recreation and participation in pleasurable activities has been demonstrated to be useful for damage limitation as a consequence of stress. Many of us are aware of the impact of stress on us but very few practice methods to minimize the impact of stress. Therefore, conviction that stress needs attention, commitment to initiate appropriate lifestyle changes and consistency in practice of these methods can make us stress resistant. Remember "It is better to make changes within us rather than waiting for the world to change to improve the situation" .

8. **Does the prevalence and incidence of psychiatric disorders differ between males and females?**
   There is no evidence to suggest that severe mental illness has any gender difference based on the current evidence. However, neurosis and depression is more often diagnosed in females who are single and those who have experienced adverse life events.

9. **Is narco-analysis useful for management of psychiatric disorders.**
   There is no scientific evidence to suggest that narco analysis is helpful in the management of any type psychiatric disorder.

10. **What are the natural ways of increasing neuro chemical substances in the brain?**
    Physical exercises, regular recreation, participation in pleasurable activities are known to be useful for subjective well being in the individual. Similarly, reducing stress is a very important element to prevent the ill effects of stress on the body.

11. **Is religious healing useful for mental health problems?**
    There is no evidence to suggest that religious healing is useful for any type of mental illness at the present time. Neurotic patients can benefit from religious healing to some extent.

7. Childhood Mental Disorders

INTRODUCTION

'A healthy child is a happy child' is a commonly heard saying. Health not only means physical well-being, but also psychological well-being. As the child grows in age, physical and mental developments also occur.

There are two aspects of behaviour of children. Firstly, they show increased physical and mental capacities to interact with others in the environment as they grow up. This is seen in the form of play activity, creativity, learning new tasks and questioning elders about activities around them. Secondly, the presence of some types of behaviors likes naughtiness, telling lies, stubbornness and other behaviors are considered as normal for short periods at different age levels. The striking aspect of childhood behavior is the acceptance of some types of behaviour as normal at some period in childhood, while they would be considered abnormal an another age. This brings up the issue of **how to recognize a child with a mental disorder?**

RECOGNITION OF CHILDREN WITH MENTAL DISORDERS

Most of the children with mental disorders do not have any physical abnormalities. The following three characteristics of behaviour can help identify children needing mental health care.

(1) A child's **behaviour is not appropriate to age.** For e.g.: when a 10 year old continues to wet the bed, it is considered a problem. When a 14 year old tells lies and doesn't go to school but plays with friends, this is a situation needing help.

(2) A child's **behaviour leads to disability:** For e.g.: when a 9 year old does not sit in one place even for a short while, keeps running around, does not attend to simple activities, breaks the toys and other articles in the house and because of this behavior, the child is unable learn anything in the class and fails repeatedly, the child is considered hyperactive and needs help.

(3) A child's **behaviour is against the social expectations.** For e.g.: A 13

year old steals a plate from the hotel, or biscuits from the shop, or money from father's pocket or from her friends. This child also needs help.

How common are childhood mental disorders? Children with abnormal or problem behaviour are about 5-10%. Very often they are not recognized early because people are not aware of this as a health problem.

Why do children behave abnormally? There is no single reason to explain a child's abnormal behaviour. Very often a number of reasons together contribute to the disturbance of the child. Mental disorders in children are caused by (1) psychological factors (2) social factors and (3) biological factors.

1. Psychological factors

Parent-child relationship: Just as protein and vitamins are necessary for a healthy physical development, so also a healthy parent-child relationship is essential for healthy mental growth. Faulty parent-child relationship can occur when parents neglect the child, or reject the child or overprotect. This makes the child emotionally insecure and dependent on others. Such children lack self-confidence.

Quarrels between parents: Parents, who frequently quarrel, beat or abuse one another, can make the child insecure. Such a child may start hating one parent or the other and feel that the parents do not care for him.

Broken homes: Are broken families. This occurs when a parent dies, or separation due to marital disharmony or divorce or a step-parent is brought in. Children may not be able to adjust to this new situation and manifest various types of abnormal behavior disturbances. Estimates suggest that 3 out of every 4 children brought to the clinic with delinquency come from single parent homes or broken homes.

Discipline: Excessive disciplining is as bad as no disciplining at all. Both can lead to problem behaviour. Inconsistency in discipline occurs when parents differ in their attitude towards the child. The child's rearing suffers and they often are confused as to whom they should obey. In some instance a child may learn to take advantage of this situation by manipulating one parent over the other.

Jealousy among the children: This is frequently seen in children. Because of difference in age between the first and the second child, jealousy can occur, as a result of which, the child might manifest behavior disturbances.

2. Social factors

Poverty: Poverty is one of the important problems in India. This may occur due to low income, or misuse of the income, or due to drug addiction in one of the parent. Poverty can come in the way of basic necessities of the child like schooling, clothing, food and play materials. In some situations poverty forces the child to take up a job even when only 8 or 9 years of age. Some children leave home and become street children.

Unhealthy social environment: A child living in a overcrowded place with socially undesirable activities around has a higher risk of developing behavior disturbances.

3. Biological factors

Heredity: When a child has a family history of mental disorder in the family, the chances of the abnormality occurring in the child is high. A child with a family history of epilepsy runs a higher risk of getting epilepsy. Any way most children born to parents with mental disorder do not develop mental disorders.

Physical problems: A child who has problems like blindness or deafness or other physical disabilities may develop behavioral problems because of the limitation in participation or due to stigma and discrimination.

Illnesses: Certain diseases of the brain can result in brain damage and consequently, behavioral problems and learning difficulties. Encephalitis can make the child hyperactive following recovery.

Low intelligence: A child who is mentally retarded can develop behavioral problems, because of inability to learn in school or inability to learn personal and social skills or cope with social expectations appropriate to their age.

COMMON MENTAL DISORDERS IN CHILDREN (UPTO 6 YEARS)

Emotional problems in child present as disturbances in behavior. It is often said that child is the mirror of the family. Problems in the family can manifest as disturbances in behavior of the child.

(1) **Dull and withdrawn** children may be brought by parents with complaints of being dull, withdrawn, inactive compared to other children of the same age or in comparison to earlier behaviour. This can be due to: (i) mental retardation (ii) physical illnesses or disability, and (iii) emotional problems.

Obtain details regarding milestones of development to rule out mental retardation (see section on mental retardation). Carry out a thorough physical examination to rule out any physical illness or disability like partial blindness, deafness, etc. Then get details regarding the living situation regarding parents, family and other psychosocial problems.

Management of the child depends upon the causal factors in the family. If the child is mentally retarded, advise training (see section on mental retardation). If the problem is physical illness or disability, plan appropriate intervention. If there are psychosocial problems, try to understand them and help the parents to find solutions for the same. Meanwhile child should be encouraged to get involved in activities with the help of parents and other family members. In difficult cases, specialist's help should be sought, especially when the problem is long standing, occurring in severe circumstances and not responding to therapy.

(2) Hyperactivity: Children can be brought for over-activity or inability to concentrate and learn specific skills. Over-activity may become a problem for others. Such a child may not keep quiet even for a minute. The common causes are mental retardation, minimum brain damage and emotional problems.

Obtain details regarding milestones of development, and look for history suggestive of brain damage like difficult labor and birth trauma, meningitis or encephalitis, head injury, etc. Get details of any psychosocial problems as in some cases over-activity may be a method of drawing attention of the elders to the needs of the children.

If the hyperactivity is severe, the child can be prescribed **clonidine 0.1** micrograms in divided doses, or small amounts of tranquilisers like **resperidone 0.5 to 1 mg in divided doses.** In addition to this, child has to be engaged in doing some attractive and purposeful activity, like making dolls from clay or wheat flour, playing with wet sand, drawing or painting, cutting pictures, gardening. Drugs should not be used for longer than 3-4 months. Simultaneously, the psychosocial factors should receive attention.

MENTAL HEALTH PROBLEMS IN CHILDREN (6 TO 15 YRS)

(1) **Bed wetting (Enuresis):** Bed wetting is a disturbance of the voluntary control of the urethral sphincter. It is related to several factors and one of them is emotional disturbance in the child. Children develop bladder control by the age of 5 years. However, in some children this control may not be adequately mastered and hence they wet their beds even after 5 years of age. Bed wetting can occur because of other reasons (e.g. lack of adequate training because parents are over-indulgent or careless and indifferent). It can also occur as an attention-seeking behaviour or symptom of emotional insecurity in a child.

In all children with bedwetting, any biological or medical reason present should be treated, after a thorough physical examination and routine investigations.

If no medical reasons are found, the following guidelines will help. Clarify to the parents their doubts regarding the reasons for bed wetting. Reduce the quantity of fluids after 7 pm, and give the child dinner earlier. Train the child to empty the bladder before going to bed. Make sure that having to go out alone in the dark or to sleep alone in a dark room does not frighten the child. Reassure the child before putting to bed. Reward the child in the morning following dry nights. Do not scold, beat or punish the child if he/she wets the bed. Discourage other children teasing the child. Attend to the problems of the child. Imipramine 25 mg at bed time can be of benefit in some cases. This should not be used for more than 4 weeks at any one time on a continuous basis. Always review the situation periodically. Refer if not amenable to treatment in 6 months.

2. **Scholastic backwardness:** This is one of the commonest problems that teachers and parents report. A scholastically backward child is one who has difficulty in coping with the studies in school. This can occur due to (1) mental retardation (2) chronic physical illness like asthma due to which the child is absent from school frequently , (3) specific problems such as difficulty in reading, or learning, writing , or misidentifying letters or the alphabets e.g. b for d (4) sensory deficits like partial blindness or deafness. (5) psychological reasons such as unhealthy teacher - student relationship, shyness, critical and high parental expectation, constant pressure on the child to study and lastly, comparing the child with other children, etc. You can help these children by assessing the main reason for poor performance. Attend to the emotional problems and help the child to get support from parents and teachers. These children may need help of a specialist initially to identify the specific problem and approach to care.

3. Conversion (Hysteria): Hysteria is a common disorder among children. It can present with headache, tremors or fits. In conversion reaction, the child has difficulties in coping with a situation and as result develops symptom for e.g. A 13 year old girl complained of continuous headache for one year. On interviewing the child and her parents, it was found that the child was being forced to work in a silk factory because of monetary problems at home, in spite of the fact that the child wanted to continue her education. After a hard day's work, the child was expected to do the household work. After about 6 months of this strain, child develops bizarre convulsive movements of both upper and lower limbs. These attacks last for about 5-10 minutes. Following the onset of symptoms parents were much more considerate, would not force the child to go to work and gave her a lot of attention.

You can help such children by: (1) finding out details of the background situation (2) explaining to the concerned people and thereby reducing the problem, (3) reassuring the parents about the treatability of the problem, (4) telling the parents not to give the child undue attention, when the child is complaining (5) talk to the child and help to understand the reason as to why the symptom occurs and assist to find different ways of handling the situation.

Other problems seen in childhood are frequent lying, stealing, running away from home, refusing to go to school, truancy and stammering. If any of these are present, such children should be referred to a psychiatrist as they require more intensive help.

MENTAL RETARDATION

Vidya is a **10 year** old girl. She is short. She cannot speak clearly. She cannot put on her clothes, or take bath herself. She does not understand much and has been in the same class for 2 years. Other children think that Vidya is 'dull'. They do not want to play with her. They at times make fun of her. On talking to Vidya's mother, one finds that Vidya is different from her other children. Her development, especially mental milestones were rather slow. Her mother says that she behaves like a **4 year** old child. Vidya's brothers and sisters help her to finish her work. Vidya spends most of the time playing outside the house. People in Vidya's house got worried when she was unable to learn or remember simple things. So they took her to healers, temples and doctors. Medicines given did not help. Nothing has been of use to make her function as a girl of 10 years.

What is her problem?

As we can see, the child is not like her brothers, sisters or other children of the same age. The child is one of those children who has low **intelligence** and such children are referred to as mentally retarded or children of low intelligence. In the lay man's language they are called 'dull' children.

What is intelligence? Let us look our hands. We can see that all our fingers are not of the same length or even the same shape. Similarly, brains of different persons differ in their capacity to solve problems, to learn new things, to remember past experiences or understand new situations. All these functions of the brain, grouped together is called intelligence. **Mental retardation is a subnormal state of intelligence. It is not an illness but a condition of poor development of the brain. Children who have this condition are 'mentally retarded'.**

About 3% of the general population are mentally retarded. The prevalence may be high in specific geographical locations. **Poverty and mental retardation is closely related. Therefore, higher the poverty more is the**

prevalence of mental retardation. Mental retardation occurs among every caste, creed and amongst the rich as well as poor.

Normally, a child of a certain physical or chronological age, should have a mental age that corresponds to the physical age. When we find that the mental age is lesser than the physical age, such children are considered to be mentally retarded. Most of the parents of mentally retarded children are able to approximately estimate the mental age of the child. Intelligence of a person is referred to in terms of intelligence quotient (IQ). It is calculated from mental age (MA) and chronological age (CA) as follows:

$$IQ = \frac{M.A.}{C.A.} \times 100$$

For example, an 8 year old child with a mental age of 4 years has an IQ of 50. A person of average intelligence has an IQ of 90 – 110. **Less than 70 IQ is considered as mental retardation.** An IQ more than 110 indicates superior intelligence. 95% of the general population is of average intelligence.

Table: 5 - Severity of mental retardation and their abilities in various stages of life

Situations	Mild MR	Moderate MR	Severe MR	Profound MR
IQ	50-70 Educable	35-49 Trainable	20-34 Trainable but needs supervised care	< 19 Trainable but needs supervised care
Preschool	Can develop social, communication skills	Can talk and learn to communicate	Motor development is delayed, minimal communication	Motor development is greatly delayed, non communicative

School age	They look like normal children but can achieve only up to 7-10 standards of schooling	Can achieve up to 2-3 standards of schooling. Benefits from vocational training.	May learn to talk and can be trained in self help skills	Motor development may occur, minimal self care with supervision.
Adult life	Can achieve social and vocational skills and function independently.	Can be engaged in semiskilled or unskilled work with some support	Able to perform simple activities with supervision.	Limited self care and needs constant support and supervision.
Under stressful conditions	Can handle it with guidance and assistance	Needs supervision and guidance	Needs constant supervision and support	Needs constant supervision and support

RECOGNITION OF MENTAL RETARDATION

There are two ways through which a mentally retarded can be recognized.

(1) By talking to the parents in detail about the growth of the child.

(2) By observing the child's behaviour and physical appearance.

A. Details of growth

In the case of Vidya, her mother is able to tell that her daughter's mental growth has been slower. Her milestones of development i.e., sitting, talking have been delayed too. Vidya has also been failing in school. Children of Vidya's age are able to dress, take bath, avoid dangers like fire or traffic, but Vidya being retarded is unable to do so.

*Mental Retardation (MR) can be recognized from a history of delayed developmental milestones. Following are 4 important normal milestones of development:

Table:6 - Showing developmental milestones

Holding neck erect	Sitting with Support	Walking	Speaking few words or phrases
3 months	6 months	9 months – 1 year	1-1/2 year

MR can be identified at different stages of growth through the following features:

Below 5 years through history of delayed milestones.

Above 5 years through history of school failures, behaviour problems, and behaviour not in keeping with social expectations.

Physical appearance

Children with MR sometimes have certain physical features which make them easily identifiable. These characteristic features appear more in the severely retarded. Mildly/moderately retarded individuals need not have any physical abnormalities and look like normal children. The commonly seen physical characteristics are: small/large head, light coloured or soft hair, rough skin, slanting eyes, thick protruding tongue. Remember that most mentally retarded children look like other children. One of the easily recognized conditions with physical abnormalities is DOWN'S SYNDROME (Mongolism). This condition is due to an extra chromosome. They have features like moonshaped face, slanting eyes and simian crease in the palm. These children are also very pleasant and friendly. The average head circumference is 51 cm. When the head is very small, the condition is called microcephaly. Very large head can be due to hydrocephalus.

Need to identify mental retardation early

Early detection of mentally retarded children is important because: 1) early guidance to parents can result in early training for the child; 2) Early training can prevent further deterioration, 3) if the mentally retarded child has associated epilepsy or behavior problems, appropriate care should be

initiated, 4) finally professionals can help parents accept their child's condition and thus prevent them from spending further on 'magical solutions' or looking for medical cures.

CAUSES OF MENTAL RETARDATION

Mental retardation can be caused by a number of factors which occur before birth, at the time of birth, or after birth. A number of these factors can be controlled so that mental retardation can be prevented to some extent.

Factors before birth: Poor nutrition in the mother, taking medicines without consulting a doctor, infectious diseases in the mother such as measles/syphilis, alcohol or tobacco use in pregnancy can result in mental retardation. Education to pregnant mothers about the irreversible nature of the condition and methods to prevent it by nutritious food, frequent antenatal check ups, and about safe delivery under medical supervision. Children born to mothers above the age of 35 years have a greater risk for Down's syndrome. Exposure to x-rays in the first trimester can cause fetal abnormalities and mental retardation.

Factors at the time of birth: Complications at the time of delivery can damage the brain. For e.g., delayed or prolonged labour, wrong use of forceps, excessive bleeding and the child being unable to breath immediately after birth, history of pre-eclamptic toxemia/antepartem hemorrhage also increases the risk of the baby being retarded.

Factors after birth: In certain children, the baby may have been normal, at birth but some factors occurring later on in life leads to mental retardation. For e.g., poor nutrition in the first 2 years, illnesses such as severe jaundice, high fevers with fits, untreated epilepsy and brain fever can damage the brain cells.

In some families, there can be **more than one mentally retarded** person. In such situations hereditary factors can play an important role. One of them is cousin marriage.

In many parts of India, like the hilly areas, iodine deficiency causes goiter and **Cretinism.** Adequate precaution by using iodized salt and early recognition and treatment minimize the brain damage.

MANAGEMENT OF MENTAL RETARDATION

Primary care doctors have an important role to play in the prevention and management of mental retardation. **Mental retardation cannot be cured by medicines or any other method. A mentally retarded child or individual can be trained to utilize the available mental capacities to the full.**

To help a mentally retarded child, use the following guidelines:

(1) Obtain information from the parents regarding what the child can and **cannot** do.

(2) Find out what the parents would like the child to be trained in.

(3) Assess the level of mental development of the child.

(4) According to the mental age, decide on the target activities ranging from the easiest to the more difficult ones.

(5) Divide the identified target activity into sub groups (steps). For e.g., if bathing is an activity, first teach the child to hold the mug, then to pour the water on the body, then to use the soap, and finally wash it off. Teach each step at a time and proceed from one step to the next after the mastery of each step.

(6) Advice the parents to repeat the same activity every day for 2-3 weeks. Or longer till the skill is mastered.

(7) Perform each activity with the child rather than instructing the child to do it on its own.

(9) Reward the child with a sweet or verbal praise every time the child performs the desired activity.

(10) Teach the health worker of the area these skills of training and advice them to follow-up these children at least once a month.

It is important to keep a longitudinal and regular contact with these families.

In children with epilepsy or other medical conditions there would be need for medication. Refer families with multiple persons with mental retardation, to a specialist for genetic counseling.

In certain states (like Karnataka, Andhra Pradesh), aid from the Government is available for severely retarded individuals. You can help the family to obtain this by arranging certification and other procedures from the Department of Social Welfare of the state. The clinical psychologist should subject mentally retarded children to IQ assessment. The psychiatrist and the psychologist should sign the certificate. Children with more than 40% disability are eligible for financial support from the government.

Simple guidelines for choosing activities for a retarded child

Table: 7 - Training for mentally retarded children

Age	Normal development	Training
0-1years	• Smile • Neck holding • Turning to one side • Sitting with support • Standing with support • Walking	**If there is delay start sensory motor stimulation – A simple way to do this is to give oil massage for 45 mts followed by hot water bath**
1-3 years	• Talking in short sentences • Can follow simple instruction • Can drink from a glass by self • Can differentiate between edible and non edible things • Recognizes objects • Can chew food	**If there is a delay start speech therapy in addition to regular oil massage**
4- 7 years	• Bowel and bladder control • Can follow simple instructions • Avoids simple dangers • Can bathe and dress by self • Plays with other children • Can write few words • Can count and do simple calculation	**If there is delay start self help skills and academic skills, speech training in addition to physiotherapy**

REFERRAL GUIDELINES

Mentally retarded child need not be referred routinely to a specialist except when the doctor (1) suspects a physical condition causing mental retardation for diagnosis with investigation. (2) Sees a child with multiple handicaps. (3) has a family with reaction which is not healthy and the family needs detailed counseling and training and, (4) finds the need to carry out genetic counseling.

Highlights

- **Mental Retardation is the most common mental disability in the community.**
- **There is no drug treatment for mental retardation.**
- **Early identification is important to initiate, sensory motor stimulation, self help skills training, social skills training, special school inputs and vocational training.**
- **Mental retarded persons who have more than 40% disability are eligible to receive welfare benefits from the government.**
- **Encouraging parents to meet periodically to discuss problems with other parents is very vital.**
- **Emotional problems in children can present as acute hysterical attacks, school refusal, being non communicative or as bed-wetting.**
- **Reading, writing and learning difficulties can manifest as behavior problems or disturbances in conduct.**

Commonly asked questions on Mental Retardation and childhood mental health problems.

Causes

1. What are the prenatal, perinatal and post natal causes of MR?

Prenatal causes

(a) Phenylketonurea – Screening test, Ferric chloride test and Guthrie test.

(b) Chromosomal abnormalities – Down' s syndrome.

(c) Maternal malnutrition during pregnancy.

(d) Maternal infection – Syphilis, rubella, Cytomegalovirus inclusion body disease, toxoplasmosis and infective hepatitis.

Perinatal causes

Birth injuries, anoxic cerebral damage, intrauterine growth retardation, Kernicterus and prematurity.

Postnatal causes

CNS Infections, malnutrition and epilepsy (untreated and uncontrolled).

2. Head injury in childhood – can it cause mental retardation.

It is unlikely that head injury is the direct cause of mental retardation.

3. Do all mentally retarded persons have a genetic basis for development of the condition?

No.

Diagnosis

1. Are there any specific diagnostic tests to confirm mental retardation?

Diagnosis of mental retardation is very simple. History from either or both parents about the development milestones and presence of congenital abnormalities, single or multi focal, is accurate enough to make a diagnosis. There are no lab tests to confirm mental retardation.

Intelligence quotient can be evaluated by psychometric tests. Clinical psychologists do this.

2. **How to differentiate between cretinism and Downs's syndrome at birth?**
   Cretinism is due to hypo functioning of the thyroid gland or due to congenital absence of thyroid. Down's syndrome is due to chromosomal abnormality. Thyroid function test is very crucial to identify cretinism and manage it. Early identification of cretinism and thyroid supplements can prevent mental retardation.

3. **Can information from illiterate mothers be used as reliable information for diagnosis of mental retardation?**
   This information is very useful and can be very accurate.

Differential diagnosis

1. **How to differentiate between a slow learner and mental retardation**

Table 8

Slow learner	Mental retardation
Developmental milestones are normal	Developmental milesstones are delayed
No features of congenital stigmata	Features of congenital stigmata may be present
Slow learners may have specific reading, writing or mathematical difficulty	Academic difficulties are uniformly present

2. **Is Dyslexia due to borderline or mild mental retardation?**
   Dyslexia is reading, writing and learning difficulty seen in children. It is a defect of processing information in the brain. Intelligence quotient of these children is normal. Dyslexia and mental retardation are two different conditions.

3. How to differentiate between autism and mental retardation.

Table: 9

Autism	Mental retardation
Behaviorally defined syndrome of unknown etiology associated with poor social interaction, disordered language, indifferent responses to people, objects and events. It is a severe disorder of brain functioning, language and behavior that appears before 3 years of age.	Below average general intellectual function originating during the developmental period and associated with impairment in adaptive functioning. Onset before 18 years of age.
Additional features are hyperactivity, repetitive behavior or stereotypes, and preoccupation with themselves.	Additional features include congenital stigmata, behavior problems and epilepsy
Prevalence 4/10000	Prevalence 1/100
Male :Female ratio is 3:1	Male :Female ratio is equal
Children with autism may have normal IQ or their IQ may be less	Children with mental retardation can be classified as borderline IQ=70-84 Mild= 50-69, Moderate = 35-49, Severe= 20-34, Profound= < 20 About 85% belong to mild MR 10% belong to Moderate MR 3% belong to Severe MR 2% belong to Profound MR

4. **What is the amount and nature of stimulus to be given for MR children? Should it be maximum or moderate?**
Sensory motor stimulation should be constant and consistent during the early part of life. We have devised a very simple exercise to facilitate sensory motor stimulation in children who are retarded and those who are less than three years of age. This involves an oil massage (coconut oil) for 45 minutes followed by hot water bath. All the components of sensory motor stimulation can occur with this simple activity. This should be continued till the child gains ability to stand and walk.

5. **Is the management of epilepsy in mentally retarded person different from non retarded person?**
Management of epilepsy in persons with mental retardation is similar to persons without mental retardation. It is important to note that prognosis of epilepsy is poor in children with mental retardation and therefore they need medication for long her period of time.

6. **Is the management of psychosis in mentally retarded persons different from psychosis in persons who are not retarded?**
The management of psychosis in mentally retarded persons does not differ compared to person without retardation. Psychotic symptoms resolve in 2-3 months after treatment provided medication is taken regularly.

7. **Kindly reflect on use of neurocetam in the management of mental retardation.**
Neurocetam or encephabol or mentat or any other drug has no role in the management of mental retardation. Sensory motor stimulation, self help skills training, social skills training, academic skills, living skills and vocational training is the most important intervention for mental retardation .

8. **How does control of fits prevent mental retardation?**
Each seizure causes certain amount of brain damage which cannot be

measured or seen. Untreated seizures can result in summated damage and therefore it should be prevented by regular anti-convulsant medication.

9. **What is the role of punishment for correction of undesirable behaviors in mentally retarded persons?**
Negative reinforcement is an important element in behavior modification. Behavior modification is based on learning principles, where desirable behaviors are positively reinforced and undesirable behaviors are negatively reinforced. This results in development of desirable behaviors or development of adaptive behaviors. Punishment is not a desirable method to facilitate development of adaptive abilities.

Let us take an example to understand behavior modification technique. Take for instance eating food without spilling it. Encourage the child to eat slowly and steadily. If he does not make a mess while eating, praise him and perhaps give him an item, which he likes most, e.g. a chocolate or non-material reward like a hug or a kiss. This is positive reinforcement of desirable behaviors. On the other hand , if he makes a mess while eating tell him that you will not take him out to the park or sent him to play or will not allow him to watch the television. This strategy is better than punishing him like slapping him or beating him or verbally abusing him. Increase the interval of positive reinforcement as the change occurs.

10. **What behavior modification technique can be used in mental retardation?**
Refer Q 9.

General issues

1. **Kindly tell about some good training centers for children less than 5 years.**
Most of the special schools are in Bangalore and there are centres in Shimoga, Hubli, Dharwad, and Tumkur.

2. **Can a PHC doctor issue a certificate for mentally retarded children?**
The psychiatrist and the psychologist should jointly issue the certificate

with respect to mental retardation. This is the current norm. Similarly, the psychiatrist should issue certificates for medico-legal purposes. Certificate issued by you is not valid.

3. **Rolling over is seen in normally under fives months of age. How do you account for it?**
Rolling over to one side, crawling should occur before 6 months. If there is delays in development of this ability in a healthy child suspect mental retardation.

4. **How to prevent mental retardation?**
Eradication of poverty, discouraging early marriage and pregnancy, avoiding all drugs during the first 2 weeks of pregnancy, avoiding radiation during first trimester of pregnancy, avoiding pregnancy after 35 years of age, avoiding consanguinous marriage, if there is history of developmental delays, good antenatal care, management of malnutrition and lastly efficient management of epilepsy in childhood.

5. **Can encephalitis or meningitis cause mental retardation?**
Yes. In fact this is one of the reasons for high prevalence of mental retardation in certain areas in our state.

6. **What are the causes of autism?**
Autism is a pervasive development disorder occurring before the age of three years and its cause is not known.

7. **Does delayed birth cry lead to mental retardation?**
Delayed birth cry can result in anoxic cerebral damage. Hence good perinatal care can go a long way in reducing the incidence of brain damage and mental retardation.

8. **What is rationale in using anti-psychotic drugs for the management of behavior problems in mentally retarded individuals? Are behavior problems in MR and cause of psychosis the same?**
Behavior problems and psychosis are two different conditions. Anti-psychotic medications are sometimes used to manage behavior

problems as a last resort or if the family is unable to purchase a specific drug like clonidine or methylphenidate or lithium carbonate. These drugs are useful in the management of specific conditions like attention deficit hyperactivity or impulse control disorders.

9. **What type of epilepsy is common in mental retardation?**
Mental retardation is not associated with any specific type of epilepsy.

10. **Why is the prognosis of epilepsy poor in mentally retarded compared to other persons?**
Prognosis of epilepsy is known to be poor in persons with mental retardation compared to persons without mental retardation. This is related to several factors like brain damage or other congenital abnormalities that may be present.

11. **What are the reasons for high mortality in mentally retarded persons?**
Longevity of persons with mental retardation is known to be less compared to normal persons. This is related to malnutrition, associated illness like epilepsy, increased susceptibility to respiratory tract illnesses.

12. **Is poverty related to increase in incidence of mental retardation?**
Epilepsy and mental retardation are most often referred to as poverty related disorders. Malnutrition, untreated epilepsy, increased susceptibility to neonatal and early childhood infection can cause cerebral insults. In addition to the above, poor antenatal care and opportunities for perinatal care can be reduced because of poverty. These factors contribute to increase in the incidence of mental retardation.

13. **Name some conditions where mental retardation can be prevented.**
Preventable causes of mental retardation are Phenylketone urea, galactoseamia, maple syrup urine disease and hypothyroidism. This can be detected by screening for in born errors of metabolism as early as possible.

14. Mental retardation is a life long disability. Don't you think there is a need for separate cadre of persons to care for such individuals in the community?

A separate cadre of persons to care for mentally retarded persons would have been ideal. That kind of a situation may not happen in a country like ours because of lack of financial and manpower resources. Recently, the Ministry of Social Justice and Empowerment has initiated a program in the community to create resources to support the carers (parents, siblings or other significant persons providing care for the mentally retarded persons in the community). Availability of family is a very major resource and boon for a country like ours. If the professional can support them adequately, lot of help can reach them in an on going manner. A separate cadre of people cannot be created in the community for care of persons with mental retardation but using the existing resources in a creative manner is very crucial.

15. What is integrated education program and its relevance to management of mental retardation in the community?

Integrated education program is a comprehensive program launched to address the academic needs of normal and special children as part of a regular school. Some of the teachers in the regular school are trained in educating deaf and dumb children, children with locomotor disability and the mentally challenged children after special training. The teachers are expected to use the local technical resources in the areas like special teacher for the mentally challenged, teacher for the visually challenged for special inputs from time to time.

16. Give us a list of facilities available for management of MR children in different districts?

Refer appendix

17. What are the social welfare benefits for mentally retarded people?

The Ministry of Social Welfare has launched several welfare measure for mentally challenged persons. Firstly, children attending regular school are entitled for annual scholarship, children more than 18 years

old and whose family income is less than 12, 000 per annum are entitled for a monthly financial assistance of Rs 125/=, parents caring for the mentally retarded persons are exempted up to Rs. 40,000 from the taxable income. Further, these children are entitled for travel concession in the train and road transport. Parents caring for such children should obtain a certificate from the psychiatrist and the psychologist after the required evaluation. This certificate is used for obtaining an identification card issued by the District Disability Welfare Officer. This document is used for availing all the benefits. A portion of the family pension is given to the mentally retarded after the death of the parent.

18. What is the role of district rehabilitation centres in the management of mental retardation?

The district rehabilitation centres are supposed to be the key resource for providing assistance to individuals and families with disability in the district, in addition to educating the community to prevent disability. The disabilities mentioned are hearing impaired, visually challenged, leprosy cured, locomotor disability, mental retardation, mental illness and blindness.

19. When the magnitude of mental retardation is 1%, why are there special schools in rural areas?

This is a very relevant question. Special schools are mostly located in urban areas and we all should work towards creating special schools in rural areas as well. This can be done by encouraging families to demand for such facilities and also encouraging NGOs working in the local area to start such facilities.

20. Can a person with mental retardation marry? What are the chances of him/her having a MR child?

Marriage is a huge responsibility. Can a person with mental retardation manage such a responsibility or not is the question. All human beings have right to get married and procreate, but the person who is going to be his or her partner should be completely aware of the disability and its consequences before the marriage. There are about 20-30% chances

of them having mentally retarded children if the cause is genetic. If the cause is non genetic the chances are less than 10% or not at all.

21. **Some children have behavior problems and does this predispose them to develop mental illness when they are adults?**
There is some evidence to suggest that behavior problems in early childhood can be used to predict occurrence of mental illness in adulthood. This is not very certain evidence.

22. **If a child of 5-10 years has been sexually abused, what type of depression or psychotic changes occur and how can we doctors treat it?**
Emotional problems and behavior problems are commonly seen in children who are victims of such a trauma. These children should be referred to higher centres for care.

23. **Psychiatric problems like depression, anxiety in pediatrics.**
Anxiety and depressive symptoms can be encountered in children in primary care settings. An anxious child may refuse to leave home or part from parents. Such children usually refuse to attend school. Anxious children can also complain of various aches and pains. It is best to refer such children to the psychiatrist in your district. Similarly, depression can also be seen in children. Like in adults children can be worried about their health, complain of aches and pains without any underlying cause. In addition such children can present with changes in behavior like refusal to play, refusal to mix with peers and be preoccupied. Their appetite and sleep may be disturbed.

24. **Can neurosis cause bed wetting in children above 5 years? If so what is the line of treatment?**
Bedwetting is a symptom of emotional problems in children. It could be related to other problems like worm infestation, uro-genital infection and abnormalities. It is always better to rule out organic problems before initiating any treatment. If there are no organic causes, encourage the child to talk or write about the difficulties in the school or home or with

peers. Teach the child to avoid liquids after 7 pm in the evening. Encourage child to empty the bladder before going to bed. Educate the parents not to criticize the child for the wetting the bed or embarrass the child in public. Encourage the child to hold whenever he/she gets an urge to pass urine and gradually increase the time of postponing voiding. Lastly, encourage the child to maintain a dairy of dry days and wet days. Instruct the child to give a red star for wet day and a blue star for a dry day. Reward the child through the parent for higher number blue stars for that week.

25. **Why children have teeth biting during the nighttime? What is the Rx?**

Bruxism can be a problem in some children. No specific treatment except reassurance.

26. **Nocturnal enuresis is bed wetting, more common in children but parents of those children will have anxiety. Up to what age it is normal? When we should start treatment?**

Bed wetting can be normal till 6-7 years of age. If bed-wetting persists beyond seven years, parents should consult the doctor.

27. **What is the treatment of somnambulism?**

Please refer to the section on common mental disorders.

28. **Dyslexia - how early can you diagnose a case of dyslexic child?**

It can be identified as soon as the child learns to read and write.

29. **Please explain regarding common child psychiatric problems?**

This can be broadly divided into the following groups. This information is being provided to help you identify the problem and refer to the psychiatrist for further evaluation and guidance. Specific development disorder includes disorder in arithmetic, writing, reading, language and articulation.

Speech disorders include stammering and stuttering and elective mutism. Emotional disorders include anxiety and depressive disorders.

Hysteria is a common problem in children. In addition to this disturbance in conduct and attention deficit disorders can be frequently seen in primary care settings. It is important to recognize these disorders and refer the children for further evaluation because drug management has limited role in children.

30. **First child developing neurotic symptoms after the birth of second child should be treated or not.**

This is a common phenomenon called sibling rivalry. This does not need any specific intervention. Encourage the older child to play with the younger child. Do not compare the two children and avoid being partial to any one of them. The older child will grow out of jealousy as time passes by.

8. Alcohol and Drug Dependence

INTRODUCTION

During the last two decades, alcohol and drug use and abuse have increased in the community because of easy availability and changes in life styles and values. Young people, skilled as well as unskilled workers, people who are in business, administrative jobs use alcohol for pleasure or to forget their worries, to get relief from tension and pains and as a way of social interaction.

Doctors come across many alcohol related health problems like acid peptic disease, liver diseases, peripheral neuropathy, accidents and injuries, intoxicated behaviour, memory deficits and alcohol related abnormal behaviour. After recognizing the alcohol abuse or dependence, you would have advised these individuals to reduce or stop taking alcohol. However, most of the persons would have continued drinking. The family members often request the doctors for some treatment so that the individual gives up the habit. It is often thought that referral to a psychiatric center for detoxification and further management is the best help. There are very few such centers and all cannot be easily reached by them. In addition, the current knowledge about use and abuse of these drugs makes it possible for the primary health care doctors to provide appropriate care in their own settings.

FEATURES OF ABUSE / DEPENDENCE.

Taking small quantities of alcoholic beverages at infrequent intervals and taking care not to get intoxicated or lose control of behaviour in public under the influence of alcohol can be considered to be 'normal drinking'. Individuals who abuse or who have become dependent on alcohol also report that they drink limited amount and alcohol is not a problem to them.

The following features can identify those with drug dependence:

1. **Tolerance:** A specified amount of alcohol/drug intake fails to give the required effect and the person increases the amount or switches to stronger beverages. Heavy alcohol users can take 300 ml to 2000 ml of liquor per day.

2. **Progressive neglect of family, work and social responsibilities:** Individuals who were taking good care of the family, working well gradually neglect them. They are irregular to work. The efficiency is decreased. The relationship with spouse, children, colleagues and friends gradually deteriorates. Family and social responsibility and commitments may be affected to a significant extent so much so that others start helping the family.

3. **Deterioration of his moral and ethical standards:** Individuals do not mind telling lies, stealing or cheating others to get money so they could buy alcohol or drugs.

4. **Neglect of alternative methods of recreation:** Alcohol use or drug use becomes the main method of enjoyment and spending free time.

5. **Health problems**: Individuals using drugs develop various symptoms related to gastro intestinal system, nervous system and cardiac and other body systems. They may sustain injuries and fractures. They can have angular stomatitis and soar tongue. Memory deficits, suspicious ideas towards spouse and colleagues, irritability, depression, hallucinations are some of the psychiatric symptoms seen among those using alcohol and drugs for a long time.

6. **Problems with law:** They can get arrested for drinking and driving, physical fights with others or such other law-breaking activities.

7. **Withdrawal symptoms:** On stopping use or delay in intake, symptoms like craving, tremors of hands, sleeplessness, aches and pains, restlessness, sweating, are reported. Drinking alcohol or taking drugs for a temporary period relieves most of these experiences.

At the end of this chapter a simple tool namely Alcohol Use Disorder Identification Test (AUDIT) is given to help identify problem persons with hazardous use of alcohol. A score of 8 or more is significant and requires help.

AETIOLOGY

Many factors play a role in leading individuals to abuse or to become dependent on substances.

- Genetic factors.
- Personality disorders (psychopathic/anti-social personality disorder are more prone to drug dependence)
- Easy availability and social acceptance of use
- Recurrent or chronic anxiety or depressive disorders
- Recurrent or chronic physical problems
- Other underlying psychiatric disorders like schizophrenia, manic-depressive psychosis.
- Family and occupational stresses.

MANAGEMENT

1. **Identification:** Early identification of alcohol related problems in the clinic is the first step towards management. In individuals (who present with recurrent gastritis, jaundice, deficiency states, repeated injuries) or women who present to the clinic with repeated aches and pains could be worried about husbands alcohol use or individuals who accept that they drink, it is important to enquire about the duration and quantity of alcohol used and its effect on family, finance, work and social status. Enquire for tolerance, craving, withdrawal symptoms and look for physical and mental health complications (use AUDIT for screening).
2. **Motivation:** Check for motivation of the person to give up drugs. If the individual is willing for treatment, understands the hazards of drug use and if the withdrawal symptoms are not very severe, or there are no severe physical problems, you can start DETOXIFICATION on an out patient basis. For detoxification of alcohol dependence, use the following guidelines for calculating the amount of diazepam or chlordiazepoxide required to control withdrawal symptoms. 30 ml of alcohol used requires either 5mg of diazepam or 10 mg of chlordiazepoxide during detoxification. Therefore, if a person is using let us say 300 ml of alcohol per day, he will require 50 mg of diazepam or 100 mg of chlordiazepoxide on the first day of detoxification which should be gradually reduced and stopped at the end of 10 days.

a) Give diazepam (50 mg) or chlordiazepoxide (100 mg) in divided doses. Reduce DZM by 5mg or cholordiazepoxide by 10 mg a day from **day 2** and stop at the end of the 10 days.

b) Start him on injectable Vitamin B1, 100 mg–300 mg IM for one week.

c) Give oral vitamin B1, B6, B12 tab or capsule every day for a month.

Treatment of other physical problems like dehydration, gastritis is also important. Advice the patient and family members to avoid situations and people who encourage the individual to take alcohol. Alternatively, engage the individual in useful activities and healthy recreation. **Addiction is a unhealthy ritualistic behavior, if a person has to remain abstinent from it, he/she should practice protective rituals like rest, recreation, relaxation, physical activity and sharing problems with family members.**

PSYCHOEDUCATION

Education of the patient, family members and the significant other (friends, colleagues) regarding (1) the harmful effects of alcohol and drugs, (2) strategies to avoid substance abuse, (3) skills to say how to say no to alcohol and drugs in these situations, (4) developing healthy protective rituals and (5) mobilization of support to the patient to reduce or solve the life problems, particularly, in the areas of family, finance, occupation and relationships is required.

The involvement of the spouse and other family members to understand the ill individuals and to reorganize family life to lead a drug free life is very important. Most drug dependent persons require long term follow up support. Refer the power point slides for further information.

REFERRAL

Referral of persons with alcohol problems should be made when the withdrawal symptoms are severe. If the patient is not confident of controlling drug taking behaviour, if physical or mental health problems are of serious nature, such patients need inpatient-detoxification. Refer him to a psychiatric center closed to you. In addition to detoxification, you have to look into

psychiatric co-morbidity like depression or anxiety. Depending on the clinical condition anti-depressant drugs can be given for 2 to 3 months (see chapter on Depression).

In addition, refer the patient to a psychiatric center if the person is having the following psychiatric complications:

1. Severe delirium tremens (severe withdrawal symptoms with alcohol).
2. Wernicke 's encephalopathy (confusion, ataxia, cranial nerve palsy (III, IV and VI), peripheral neuropathy, hallucinations, memory loss, etc).
3. Dementia with psychotic features.
4. Neurological complications.

PREVENTION

All medical doctors can play a vital role in the prevention of alcohol and drug abuse by educating the target groups like students, teachers, young adults, workers, members of voluntary agencies, about the harmful effects of alcohol and drugs.

In addition to alcohol dependence, at the level of the primary health center, you can come across individuals who abuse cannabis (ganja, bhang) sedatives and tranquilizers (diazepam, phenobarbitone), pain killers (aspirin, ibubrufen) and opiates (fortwin, tidigesic injection).

Many features described earlier hold good for these substances. Management of these dependence situations follow the principles outlined namely (i) recognition of the need to live a drug free life, (ii) detoxification, (iii) assessment of individual's personal, social and occupational life, (iv) support to individual, (v) involvement of family, (vi) rehabilitation and (vii) long-term follow up.

COMMON MISCONCEPTIONS ABOUT ALCOHOL

- Alcohol is a tonic, improves the muscle power.
- Alcohol is a medicine, cures cough, cold, prevents paralysis, etc.
- Alcohol improves sexual power.

- Alcohol improves creativity.
- Alcohol is the best sedative.
- It is possible to have controlled drinking.
- Taking good food (meat) takes away the ill-effects of alcohol on the body.
- Alcohol is the best pain killer.

Please discuss these issues with patients and others and educate them.

Highlights

- **Alcohol and substance use is assuming epidemic proportion in the country.**
- **Alcohol related problems present as physical problems in the person and emotional difficulties in his spouse and children.**
- **Persons suffering from alcohol related problems could be very effectively treated in primary care settings.**
- **Persons with dependence and reasonably good physical health can be detoxified in the primary care clinic.**
- **Detoxified person should be taught to practice regular physical activity, relaxation and recreation. These should be incorporated in their life as rituals.**
- **Persons with delirium tremens and severe physical complication should be referred to higher centres.**
- **Saying no to drugs is the only way to prevent dependence.**
- **Attending self-help groups is also important to remain abstinent.**

Management

1. **How to treat alcohol dependence in primary care settings and what is the role of disulfuram?**

   Alcohol dependence can be treated very effectively in primary care settings. Persons motivated for treatment, having family support, mild to moderate withdrawal features, no physical complications, willing to comply with the doctor's advice are suitable candidates for out patient or in patient detoxification in primary care settings. Disulfuram is a chemical deterrent available to maintain abstinence after detoxification. Disulfuram can produce severe reactions if alcohol is ingested at the same time. These reactions can be fatal at times. The specialist does initiation of disulfuram after detailed evaluation. Therefore kindly refer patients willing to take disulfuram to the secondary or tertiary care facilities. Provide follow up after such an evaluation.

2. **Can a person with alcohol dependence be treated without his knowledge? Family members make requests of such a nature frequently.**

   No, no one can be given medication without his or her knowledge. Kindly take time to educate the family members that such a practice is not possible. Make an effort to educate the patient to seek treatment and most often such an initiative yields very good results. Please remember, abstinence is a life style change and a personal choice. The person concerned should be motivated to change without which no intervention can be effective.

3. **How to treat disulfuram reaction in PHC?**

   Persons taking disulfuram is given a card to be carried with him / her all the time. In the event of alcohol use in addition to regular intake of disulfuram the following symptoms can occur.

   (a) Chest pain

   (b) Palpitation

(c) Sweating
(d) Hypotension
(e) Tingling numbness throughout the body
(f) Vomiting
(g) Throbbing headache

Start an IV line and maintain a slow drip, if hypotension worsens increase the IV infusion. Administer promethazine 50 mg IV. If the hypotension does not improve add dopamine or ephedrine into the drip. Respiratory distress improves with oxygen inhalation. Patient needs to be kept under observation for the next 24 hours.

4. **How do you manage acute alcohol intoxication in a PHC?**
Intoxicated persons should be first subjected to clinical examination to rule out lacerated injuries, fractures and intracranial space occupying lesions like subdural heamatoma. Intoxicated individuals are at risk for such injuries. There is no specific medication to mange intoxication except an intervention like dialysis. The most practical approach to such a problem is to administer 5 mg of haloperidol if he is very aggressive and violent.

If the person has features of withdrawal at the time of evaluation, it is best to detoxify him using benzodiazepines. Reinforce use of protective rituals like physical activity, recreation, relaxation and resuming routines. Consider referral for further evaluation because frequent relapses needs specialist intervention. Approximately 50% of patients relapse within one year of abstinence.

6. **How do you counsel alcohol dependant depressed patients?**
Chronic alcohol use in the person can make him feel very guilty and depressed. Encourage considering treatment. Most often persons with alcohol dependence are unaware of availability of treatment for effective management of withdrawal symptoms. This is an important input you can make for the person.

6. **What is the dose of disulfiram and treatment of fatal complication of disulfiram therapy?**
The dose of disulfuram per day is between 250 – 500 mg in a single or two divided doses. Refer Q 3 on disulfuram and alcohol related reaction and its management.

7. **What is the treatment for alcoholic seizures?**
Seizures during the withdrawal phase are referred to as "Rum Fits". This does not need anti-convulsant medication. Detoxification with benzodiazepines is sufficient.

8. **In an alcoholic with seizures is it required to rule out other causes for seizures or can it be assumed to be due to alcohol itself? Will this person require anti-epileptics like eptoin?**
There is no need to investigate seizures occurring during alcohol withdrawal phase. There is no need to start anti-convulsant medication like in the case of epilepsy.

9. **De-addiction from alcohol.**
Ref to the detoxification regime in the power point slides in the appendix.

10. **How safe is detoxification of alcoholics in primary care settings?**
Detoxification is very safe in primary care settings. This can be done both out patient and in patient basis. Refer the power point slides for guidelines to chose appropriate patients for detoxification.

11. **I am treating a case of alcohol abuse. He is taking Tab disulfiram 250mg BD since 2 months. Now he is found to be hypertensive. I have started him on Amlodepine. He is complaining of intermittent attacks of fears and sweating. Kindly advice.**
Fear and sweating in this patient is unrelated to concomitant use of anti-hypertensive drug. Perhaps this person is using alcohol in small amounts or coming in contact with alcohol containing substance like perfumes, shaving lotions, cough syrups or any other preparation

containing alcohol as a preservative. It is important to educate the patient to avoid all substances containing alcohol (both consumption and contact with it).

12. **There is a patient who takes 5mg - 10 tablets of alprazolam/day against advice. How do you to treat him?**
This patient has developed alprazolam dependence. Refer this patient for inpatient detoxification to either secondary to tertiary care centre.

13. **Kindly tell about alcohol withdrawal pre and post treatment?**
Refer power point slides in the appendix on alcohol use disorders.

9. Epilepsy

INTRODUCTION

Epilepsy is a disorder of the nervous system in which altered level of consciousness occurs whenever there is disturbance in the well ordered functioning of the neurons in the brain, most often due to electrical disturbances. The most characteristic aspects of epilepsy are the repetitiveness of attacks and recovery after an attack. Epilepsy can start at any age. In majority of the cases, it starts in childhood or adolescence. The common causes of epilepsy, in India are: (i) birth injury, (ii) difficult labour, (iii) brain infections and head injuries. In many cases it occurs without any clearly identifiable cause. **It is estimated that in the general population about 8 to 10 persons in 1000 have this problem at any one time.**

TYPE OF EPILEPSY

There are 3 common types of epilepsy:

1. Grandmal or Generalized epilepsy
2. Focal epilepsy (including temporal lobe epilepsy)
3. Focal epilepsy becoming generalized ***Grandmal Epilepsy***

RECOGNITION OF EPILEPSY

The most important aspect of diagnosis is the need for a very good and clear history. It is not always possible for the doctor to have an opportunity to see an actual 'fit' in a given patient. In view of this, it is important to talk to the family members of the patient who have seen one or more 'fits'. It is not adequate to depend on the information given by the patient as the patient does not always have memory for details of the 'fit'. On talking to a relative, the history provided would include a description, as follows:

"The attack or the fit occurs suddenly. The attack occurs at home, school or place of work. Patient falls down and loses awareness of surroundings (unconsciousness). This is often associated with a loud cry. During the attack face is noted to be red and the eyeballs are rolled up. This is followed by a

short period of few seconds when the whole body becomes stiff. Soon the hands, legs and rest of the body move in a rhythmic manner (jerky movements). At this stage frothing in the mouth is also noted. At times the wetting of clothes with urine is seen. Patient does not respond to what others are saying or doing during this time. Gradually the jerky movements become less and the patient becomes completely still and goes off to sleep. Patient complains of body aches, fatigue, headache and prefers to take rest. Sometimes, after an attack patient remains confused and behaves abnormally for a short period".

Some patients experience clearly identifiable changes like subjective dullness, irritability, headaches, smacking of lips and staring at blank spaces. These changes suggest that patient is likely to get an attack. If a definite pattern is noted then patient can prevent harm during attack, by reaching a safe place on experiencing these symptoms.

Focal epilepsy: The convulsion (jerky movements) start in one small part of the body like the hand or leg, or a side of the face and the attack may either remain confined to that part only or is followed by a generalized epileptic attack.

Temporal lobe epilepsy (TLE): Unlike in grandmal epilepsy, loss of consciousness is not the striking feature. Patient behaves in an abnormal manner for a few minutes in which the patient appears to be angry, apprehensive and carries out repetitive purposeless activities for which the patient has no memory. In between the attacks patient is completely free of any disturbance. Patient may also experience hearing of voices, seeing visions or experience foul odors. It is often mistaken for psychosis but can be recognized as TLE by its very short duration, normalcy in between the attacks and repetitive nature of attacks. Behavior changes predominate the presentation; it is also known as **psychomotor epilepsy. A proportion of patients may develop generalized tonic clonic movements after behavior disturbances.**

It is important to talk to a relative who has seen the fit to arrive at a diagnosis. Following questions help in arriving at a diagnosis:

1. What is the duration of each attack of fits?
2. What is the frequency? When and where it occurs?
3. Occurrence of injury during the attack?
4. Description of the attack step-by-step and post-fit-symptoms.

Differentiation from hysterical fits

Primary care doctors are familiar with attacks of fainting or possession which occurs dramatically. These symptoms occur due to emotional problems. If is important to differentiate between epilepsy and hysteria since management of these disorders are different.

Table 10

True seizures	**Hysterical seizures**
Age at onset – 5–15 years	Age at onset – any age
Type of seizure – Any type	Type of seizure–Bizarre movements
Duration of seizure – Usually 1-2 min	Duration of seizure – several min or longer.
Sensorium – altered or unconscious	Sensorium – Intact
Amnesia to the event - Present	Amnesia to the event - absent
Associated factors – sleep deprivation, hypoglycemia, emotional stress and photic stimulation	Associated factors – emotional stress and psychological conflicts
Bowel and bladder disturbance - Incontinence of urine or faeces	Bowel and bladder disturbance – none
Time of attack – usually while asleep	Time of attack – any time of the day or at a particular time only
Settings of attack – when alone or when with people	Settings of attack – Always when alone
Gender – affects both the sexes	Gender – common in females

Medication – Anticonvulsants	Medication – Minor tranquilizers for 4-6 weeks and counseling
Outcome – Seizures are well controlled with anti-convulsant after stable blood levels are established	Outcome - Hysterical convulsions remit with resolution of stress or intra psychic conflict.

Similarly, the table below provides information to differentiate between syncopal (Vasavagal) attacks and epilepsy.

Differences between epilepsy and syncope

It is important to differentiate epilepsy from syncopal attacks. This has important implications for management. The following table shows the differences for you to make correct diagnosis.

Table 11

Clinical Features	Epilepsy	Syncope
Precipitating Factors	Present- sometimes Emotional stress, hunger, sleeplessness	Present always Sudden change in posture, prolonged standing, hot weather, crowded rooms, unpleasant scenes
Onset	Sudden	Sudden
Features	Prodromal features, aura, altered sensorium with tonic or clonic or both tonic clonic movements	Light headedness, dizziness or nausea, ringing in the ears and vision going black. Some times mild twitching or in-coordinated movements
Duration	2-3 minutes	30-60 seconds

Postictal	Drowsiness, confusion, sleep, headache, vomiting or lapse into deep sleep.	Rapid recovery in a supine posture.
Incontinence	Usually present	Usually absent
Tongue bite	Sometimes	Rare
Injury	Common	Rare
Skin Color	Flushed	Pallor followed by flushing

DIAGNOSIS OF EPILEPSY

Diagnosis of epilepsy can be reliably made in any setting based on good history about the attack from a relative, friend or any other person who has seen the attack. There is no need to routinely conduct investigations to confirm the diagnosis of epilepsy. The investigations done to understand the cause of epilepsy are EEG and C.T. Scan. These investigations can be of value to detect the nature of the intracranial pathology in symptomatic epilepsies. These investigations are indicated in patients of focal fits, late onset (above 20 years age) epilepsy, and epilepsy with post ictal neurological deficits. Majority of epilepsies are idiopathic and manifest before 15 years of age. Hence idiopathic epilepsies does not warrant any specific investigation since there is no identifiable cause for seizures.

HOW DO PATIENTS WITH EPILEPSY PRESENT IN THE CLINIC

One of the common reasons to consult a primary care physician or a general practitioner in the community is history of sudden fall or loss of consciousness. Most of the cases of epilepsy is correctly diagnosed by the doctors. Their ability to provide follow up care and management of side effects is unfortunately limited due to various reasons. Patients do not come for follow up regularly; the hospital pharmacy may not contain the needed medicines for treatment. Once the treatment is available and public is

educated, they will start coming for the control of epilepsy. In addition, the doctor should suspect epilepsy in the following situations :

i) **Repeated burns and injuries,**

ii) **Children with mental retardation,**

iii) **Abnormal behavior lasting for a few minutes only, either with or following fits,**

iv) **Poor school performance. In addition you may hear of a person who is taking treatment from traditional healers for being 'possessed by evil spirits'. These persons can be having epilepsy.**

HELP IN ACUTE ATTACK – FIRST AID

Epileptic attack is a self-limiting event due to excess electrical activity in the brain. The attack lasts for 1-2 minutes and the person lapses into sleep. It is important to teach everyone in the community to provide first aid, when they see a person having an attack. It is important to make the person comfortable. No crowds should gather around the person. Sharp and dangerous objects, if they are near the patient should be removed. Loosening the clothes is one way of making the person comfortable. Turn the face to one side (this will enable the flow of secretions out of the mouth). Do not pour water or put anything else into the mouth during the fits. Similarly do not try to hold arms or legs when they are showing jerky movements. Holding hands and legs may do harm to the patients than any good. Some patients may be confused and disoriented for a couple of minutes. Stay with the patient during this time and on recovery help him reach home. Both these conditions will improve by themselves in a short time, usually within one hour. There is no need to place an iron object in the hands of the patient.

Febrile convulsions: At times children of age group 6 months to 5 years are brought with a history of fever and fits. If the child has status epilepticus, has family history of epilepsy and frequent attacks of fits with mild fever, start anti-epileptic treatment. Otherwise do not put the child on that treatment. Reassure the parents. Treat the cause of fever. Advise them to bring down the temperature in future episodes of fever by antipyretics, tepid sponging. If the child gets an attack without fever, start treatment as per earlier guidelines.

MANAGEMENT OF EPILEPSY

The following regime is to be followed for the treatment.

Only one attack: Wait to start treatment. Ask the patient to report if there are further attacks.

At least two attacks in 6 months: start treatment.

Start the treatment with one drug like – Phenobarbitone which is effective and least expensive. Start with a small dose depending on the age. For example:

- **3 years - 15 mg single bedtime dose.**
- **3 – 10 years - 30 mg single bedtime dose.**
- **Above 10 years - 60 mg single bedtime dose.**

It is important to give the **following instructions** to the patient and family soon after starting medication.

- **Take the prescribed medicines at bedtime, regularly, not missing even a single dose.**
- **Patient can feel drowsy in the beginning of the treatment. This should not lead to any change in drug dosage without discussing with the doctor.**
- **Missing of dose can result in an attack. Keep stock of medicines for at least two weeks at any time.**
- **Keep medicines in a safe plastic container to avid misuse or accidental use by others especially children.**
- **Maintain a record of all the attacks during treatment.**
- **Regular follow-up (atleast once a month) is essential for the adjustment of dosage and assessment of any side effects.**
- **Visit the doctor in the beginning once a fortnight, later on once a month.**
- **Be cautious till the attacks are fully under control, do not work near fire, water, moving wheels, do not climb trees and do not drive vehicles.**
- **No food restrictions required during treatment.**

- **Patients can continue all routine work (going to school, work, etc.) and lead a normal life during treatment.**

Drugs have to be taken for a minimum period of 2 years after the last attack of 'fits'.

FOLLOW-UP OF PERSONS WITH EPILEPSY

Persons suffering from epilepsy need long-term care. Antiepileptic drug is the main treatment at the present time. Doctor providing follow up care should focus attention on the following aspects. Encourage all patients attending follow up for epilepsy to maintain a diary. This should have information about the diagnosis, drugs and the address of the patient written clearly.

Medication: Check for compliance with medication every time the patient reports for follow up. Poor compliance is one of the reasons for recurrence of seizures.

Recurrence of seizures: If the patient reports recurrence despite regular treatment, during the follow-up visit, (1) Check whether the patient is taking medicines in the required dose and its regularity; (2) Enquire about any precipitating factors like fever, alcohol intake, sleepless nights, missing a meal, and advise about maintaining regular habits; and the type of seizure. (3) Rule out hysterical attacks by enquiring about the reaction of the family and life situation and type of seizure. **(It is good to remember that some individuals can have a combination of both genuine and hysterical fits).** Provide support to the patient and family.

Following clarification that the patient is really getting epileptic attacks in spite of regular medication; step up the dose by 30 mg. You can go upto 180 mg a day in an adult. If attacks are not controlled in 4-8 weeks, add **Diphenyl Hydantoin** 100 mg/day. Increase it to 300 mg if necessary, in adults. Another drug that can be used in epilepsy is Carbamazepine. It is comparatively expensive.

When the patient is attack free for 2 years, gradually taper the dose and stop the medication over 6 months period. In case of relapse, drugs are to be restarted and continued for another 2 years. In some patients, especially with brain damage drugs may need to be continued lifelong.

Long term complications with drug: In majority of the cases there are no major side effects, no serious complications with long-term use of Phenobarbitone. With Diphenyl Hydantoin some can develop hypertrophy of gums, excessive hair growth after long-term medication. A few can develop ataxia and nystagmus, which disappear after reducing or stopping the drug.

Status epilepticus: Sometimes patients can have repeated attacks continuously without regaining consciousness in between the attacks. They will be brought to you as an urgent problem. **This is a medical emergency.** Give diazepam 5 to 10 mg i.v. slowly. Following this procedure, attacks will remit. In case the attacks are not remitting, patient should be referred to a specialist. It is advisable to hospitalize a patient with status epilepticus and keep him under close observation. Adequate attention should be given to his nursing needs especially during the period of unconsciousness. Once the fits are controlled, the parenteral antiepileptics will have to be replaced by regular oral antiepileptic medication.

Psychiatric problems associated with epilepsy: Compared to general population, patients with epilepsy, suffer often from psychiatric morbidity like mental retardation, behavioral problems, depression, anxiety, hysteria, organic psychosis. They have to be identified and managed. (See relevant chapters in the manual).

Individual and community consequences: Epilepsy can affect persons of all ages. The epileptic attacks of an individual can make him look different to others and this can create difficulties and inferiority feelings. In addition, the general beliefs in the community about the disease being infectious or hereditary can create problems at work and marriage. During the fit individuals get hurt and this may result in disabilities. If the fit occurs in the middle of the road, or near water or fire, or while working near moving machines, or heights, it can be at times fatal. **The importance of controlling fits lies in decreasing harm to the individual, preventing social stigma, improving his social functioning, and minimizing the damage to the brain.**

Helping families to live with epilepsy: When a person is suffering from epilepsy, parents and family members become panicky and look for a reason for the illness. Sometimes parents get too anxious and overprotective to the extent the child is made an invalid. In these situations there is a need for

guidance and counseling to the parents in the management and rehabilitation of the person with epilepsy. In the beginning, parents of the patient may not be willing to accept the treatment for want of information. At this stage, talk to them, not once or twice but many times, and try to make them realize that it is a disease and with treatment patient will get better, stop having the attacks and work properly. It is important to convey that the disease is not infectious or contagious. In all cases, an optimistic picture can be shared. These persons can lead the life of a normal person after getting better with the control of illness through regular medication.

REFERRAL TO A SPECIALIST

Referral to the specialist should be considered in the following situations:

1. Poor control of seizures after adequate dose of medication.
2. Sudden increase in frequency of seizures.
3. Suicide attempts.
4. Development of neurological deficits.
5. Drug toxicity.

Commonly asked question on Epilepsy

Diagnosis

1. **Is it necessary to investigate a child with febrile convulsions?**
   Need for investigations in a child with febrile convulsions depend on several factors. Investigations are required in the following situations:
   (a) Seizures occurring for the first time in status
   (b) Focal seizures with post-ictal neurological deficits lasting for more than 24 hours
   (c) Features suggestive of meningeal irritation
   (d) Deteriorating sensorium

If there is no evidence of above features in the child do not subject the child for investigations.

Differential Diagnosis

1. **Differences between seizures and pseudo seizures.**
   True seizures can be generalized tonic, clonic, both tonic and clonic, simple parital, complex partial and reflex seizures in nature. These patients can develop pseudo seizures on the background of stress. The pseudo seizures are clinically different from the past genuine seizures and we have made a table for you to understand the difference between them. We have used the term hysterical seizures instead of pseudo seizures for understanding this condition easily.

Table:12 - Differences between epilepsy and hysteria

True seizures	Hysterical seizures
Age at onset – 5 –15 years	Age at onset – any age
Type of seizure – Any type	Type of seizure – Bizarre movements
Duration of seizure – Usually 1-2 min	Duration of seizure – several min or longer.
Sensorium – altered or unconscious	Sensorium – Intact
Amnesia to the event - Present	Amnesia to the event - absent
Associated factors – sleep deprivation, hypoglycemia, emotional stress and photic stimulation	Associated factors – emotional stress and psychological conflicts
Bowel and bladder disturbance - Incontinence of urine or faeces	Bowel and bladder disturbance – none
Time of attack – usually while asleep	Time of attack – any time of the day or at particular time only

Settings of attack – when alone or when with people	Settings of attack – Always when alone
Gender – affects both the sexes	Gender – common in females
Medication – Anticonvulsants	Medication – Minor tranquilizers for 4-6 weeks and counseling
Outcome – Seizures are well controlled with anti-convulsant after stable blood levels are established	Outcome - Hysterical convulsions remit with resolution of stress or intra psychic conflict.

2. **Difference between partial complex seizures and absence seizures**

A complex partial seizure as the name indicates is a seizure which in distribution and phenomenon is complex in nature. This seizure is associated with confusion or altered sensorium. An example of complex partial seizure is described as follows – usually a person with CPS is brought to the clinic with history of brief lasting strange behavior, characterized by lip smacking or searching movements , counting movements associated with confusion and inattentiveness. This person is unable to recall the events that happened clearly. This episode may last for 2-3 minutes and the individual might lapse into sleep subsequently.

On the other hand absence seizure is a brief spell of unresponsiveness in the individual. Usually common in children, who are brought with history of being unresponsive for a very brief period or history of dropping things while playing and so on. These children are unable to recall the event.

3. **Breath-holding spells and seizures – Is it seizure disorder.**

No, it is not seizure disorder and does not need anti-convulsant medication. Breath holding spells are common in children between 3-5 years of age and these spells disappear as they grow older.

Management

1. **Drug of choice for absence seizures in primary care settings**
   Sodium valproate is very helpful for such patients.

2. **Some children on phenobarbitone develop behavioral problems after a period of time. How to manage such children?**
   Phenobarbitone can cause hyperactivity in children. Approximately 10% of children on these drugs may have over activity, impulsivity and irritability. Change the medication to Diphenyl Hydantoin. Change of the drug should be done gradually i.e. over a period of 4-6 weeks. Abrupt withdrawal can cause break-through seizures. Hyperactivity is very common in children who have a history of brain damage. It is therefore better to avoid phenobarbitone in children who have history of anoxic cerebral damage or mental retardation.

3. **Does hot water epilepsy need regular treatment like other seizure disorders?**
   The following strategies are useful for management of hot water epilepsy (Refex epilepsy). Educate the patient to avoid hot water bath. If that is not possible taking bath in luke warm water (only 3-4 mugs for washing the head), if this is not possible prescribe Tab Clobazam 5mg to be taken 45 min before the bath. There is no need for regular medication.

4. **A 35-year-old mentally retarded person is on phenytoin sodium for more than 15 years and he has not had fits for 5 years. Should we stop treatment and if so how should we stop drugs?**
   The current norms are as follows, if a patient is seizure free for at least 24 months after initiation of medication, drugs can be withdrawn gradually over a period of 4-6 months. In the above case the patient is seizure free for 60 months and therefore drugs are be gradually withdrawn.

5. **How does medication help to control seizures?**
   Anti-convulsants reduce seizure frequency by stabilizing membrane potential of the neurons.

6. **A person is treated for epilepsy and if he has a relapse what should be done?**

   Restart medication. Approximately, 10% of patients are likely to have recurrence of seizures after withdrawal of medication within the first one year of stopping medication.

7. **If a person develops psychosis on the background of epilepsy, how should such a case be managed?**

   A small proportion of patients with epilepsy can develop psychosis. Start anti-psychotic medication as soon as possible. Tab haloperidol in a dose of 5-10 mg per day is recommended. Psychotic symptoms should resolve in 8–12 weeks.

8. **Patient had eclampsia and pregnancy was terminated. She subsequently developed fits. Does she need anticonvulsant medication?**

   This should be treated as epilepsy and anti-convulsant medication is indicated if the patient has had more than two seizures.

9. **Epileptic patient is not responding to phenobarbitone, phenytoin and carbamazepine and combination of all the above and patient died with uncontrolled status epilepticus. What could be given to not responding cases?**

   This is an unfortunate case of treatment resistant epilepsy or also called intractable seizures. Such patients should be referred to specialist centres for further evaluation and treatment. Approximately 18% of epileptic patients are resistant to treatment.

10. **In case of febrile convulsions - when should we start antiepileptic drugs?**

    Anti-convulsants are indicated in all children with atypical febrile convulsions. Medication can be initiated after the second episode of seizures.

11. **What is the treatment and pre-pregnancy counseling of a pregnant epileptic in first trimester who is on regular treatment with phenobarbitone?**

Anti-convulsants are very important in pregnancy. Pregnancy decreases seizure threshold and therefore the frequency of seizure can increase dramatically. This is a very dangerous clinical situation and should be handled with a lot of caution. Educate the lady to take medication very regularly and also reassure her that the medication is safe both for her and her to be born child.

12. **In what type of epilepsy is treatment life long?**

Seizure type does not determine chronicity of epilepsy. Chronicity is a reflection of underlying cause. For example a person with tuberous sclerosis is likey to have seizures at periodic intervals despite good anti-convulsant coverage.

13. **For a case of single episode of unprovoked seizure attack, is it absolutely necessary to start antiepileptic drugs without EEG, or to wait for one more attack to occur?**

Start medication after two attacks of seizures. This is the current practice. There is no need to investigate all cases of seizures. The following are the situations you should consider for further evaluation by the specialist:

a) Late onset seizures i.e. onset after 20 years of age
b) Focal seizures with post ictal neurological deficits lasting for more than 24 hours.
c) Status epilepticus
d) Attack in clusters
e) Features of raised intracranial tension
f) Poor response to medication (failure in control of seizures despite using two or more drugs in adequate doses).

14. **If we start AED, how long do we have to continue it for one year or minimum 2 years?**

Current norms are as follows – medication should be gradually tapered off after two years of fit free period. It is generally accepted that

recurrence of seizures is about 10-20 % after two years of seizure free period and therefore medication should be withdrawn over a period of 4-6 months. Medication should never be stopped abruptly.

15. **How do you manage a case of hot water epilepsy, abdominal epilepsy and Single episode of seizure (unprovoked)?**
Abdominal epilepsy is a variant of temporal lobe epilepsy. It should be treated like any other epilepsy with either phenobarbitone or diphenyl hydantoin or carbamazepine. For other answers refer Q 3 and 13.

16. **In a case of Hypoxic Ischemic Encephalopathy, what are the changes of an epileptic attack worsening MR?**
Untreated epilepsy can cause summated brain damage. Hence it is certain to add insult to injury. Prevent brain damage by treating epilepsy.

17. **How long treatment should be given to different types of epilepsy?**
Refer Q 14.

General Issues

1. **We have been issued orders not to prescribe phenobarbitone to patients who attend the PHC. We are supposed to issue it only after the instruction from the neurologists.**
The order is wrong if such an order was issued. The essential drug list for mental health care in primary care is as follows:
   (a) Chlorpromazine
   (b) Imipramine
   (c) Phenobarbitone
   (d) Diphenyl Hydantoin
   (e) Injection Fluphenazine
   (f) Trihexyphenydyl
   (g) Diazepam

That order might have been issued by over sight, please discuss with your DHO. If there are problems, you can contact Joint Director, Mental Health, for further clarification.

2. **What is the role of alternate medicine in refractory epilepsy?**
Current evidence suggests no role for any other intervention other than anti-convulsants.

3. **Definition of epilepsy**
Epilepsy is an ictal event which has the following characteristics. It is an event which is circumscribed, which has a quality of stereotype, and is self limiting in nature, tends to recur and the individual has amnesia to the event.

10. Treatment of Mental Disorders

INTRODUCTION

In the earlier section, it was noted that mental disorders are caused by a number of factors. Hereditary changes in the brain chemistry, unhappy childhood experiences, conflict in the family, various real life stresses and strains, social problems and many other factors interact to produce the symptoms of mental disorders and the various clearly defined syndromes.

It is often widely thought that mental disorders cannot be treated and no specific methods exist for the management of mentally ill persons. People are reminded of the situation in the past when mentally ill persons stayed for very long periods of time, sometimes for life, in mental hospitals. As a result all types of mental disorders were equated with chronic psychoses. But during past few decades, major advances have taken place in the understanding and management of different types of mental disorders. These significant developments have contributed to satisfactory and effective treatment for many of the mental disorders. For example, **prior to the availability of specific treatment, only 13% of patients recovered symptomatically after a schizophrenic episode, while now less than 15% become 'chronic' and the rest (85%) recover to varying degrees.**

There are mainly two basic approaches to the management of mental disorders; namely the psychosocial and the physical or biological or pharmacological. Both these methods may be used either separately or jointly. In each patient a careful understanding of the factors involved in the illness will help the doctor decide the specific approach required for satisfactory treatment.

The following section covers the different treatment approaches :

A. *Psychological management*
B. *Drug management*
C. *Family and mental health care*
D. *Rehabilitation*
E. *Psychiatric emergencies and hospitalization*
F. *Legal aspects of psychiatric care*

PSYCHOLOGICAL MANAGEMENT (PSYCHOTHERAPY)

As part of general medical practice, doctors come across patients who relate their life problems. Very often patients who come with vague bodily complaints have the tendency to talk about their concerns and worries with their doctor. Most doctors are generally not very comfortable in providing care to this group of patients with 'real-life stress'. Doctors have difficulty in taking the role of a counselor. This is largely because undergraduate and post-graduate medical training does not prepare the doctors or specialists to recognise and care for the emotional needs of their patients.

Psychotherapy or counseling essentially attempts to restore the emotional equilibrium of a person in distress by psychological means. It involves very simple measures like **listening** to a person in distress about his difficulties, **understanding** the nature of his problems and talking to the person. An authority in this field has said **'Psychotherapy to a large degree is nothing but a systematic conscious application of methods by which we influence our fellow men in our daily life'**. The most important difference is that intuitive knowledge is replaced by the well-established general principles of psychodynamics'. There are different major schools of psychotherapy, which have developed specific techniques for specific types of mental illnesses with specific goals. While the various psychotherapeutic techniques and methods are important for a specialist in the field of mental health, all doctors can become familiar with the basic principles involved in counselling and psychotherapy. A separate Manual of Psychotherapy for Medical Officers by Sriram T.G., Chandrasekhar, C.R., Isaac, M.K. and Srinivasa Murthy, R. (1990) has been published by NIMHANS, Bangalore.

The type of psychotherapy useful in general medical practice is the **'brief supportive psychotherapy'**. The fundamental prerequisite for a successful therapy is a **trusting relationship** between the doctor and patient. This is vital for the patient to gain confidence in the doctor. All doctors must be conscious of their therapeutic capability and the possibility of making changes in the patient. Doctors should give ample chance for the patients to talk about their problems and unburden their anxieties, worries and concerns. In general medical practice, though the drugs play an important role, counseling the patients about diet, relaxation and other preventive

measures have been found to be very useful. With respect to medical problems, the nature of counseling is obviously about telling the patient precisely what to do and what not to do. But with psychiatric patients, the nature of counselling is considerably different, because of the following, (I) though medicines have a definite role in few psychiatric conditions like psychoses and depression, for the large majority of patients, the cause of distress is related to psychosocial situations which is different for individuals. Therefore, generalised formulation of simple and precise do's and don'ts is not possible; (ii) in general medical practice, an individual suffering from, say a fracture, is assumed to have an adequate and well functioning mental framework with which he carries out the doctor's advise. In psychiatric patients this function is disturbed; like lack of will to live or to struggle or to face reality; (iii) most psychiatric patients may have been unable to adequately perceive and understand the real cause of their suffering, and ways to solve them. Most often, psychological distress in the patient prevents him from understanding the problems even after saying what the doctor thinks of it. In such instances, it would become necessary for the doctors to proceed in simpler steps by gradually preparing the patient at each stage to understand the next step.

THERE ARE A FEW POINTS WHICH THE DOCTOR SHOULD ALWAYS REMEMBER.

Though **reassurance** is a very useful method, and has a definite role in counseling it is important to note that things which are not under our control should be reassured.

What not to reassure?

The doctor or counselor should never reassure about an issue over which he/she has no control.

i) **The course of the illness** is predictable based on clinical factors and available research evidence. For example, if the patient has an anxiety state due to various factors related to difficult interpersonal problems in the family, neither the patient nor the doctor has any real or direct control over what might happen.

ii) **Efficacy of drugs:** It is very well known that antipsychotic and antidepressant drugs are very effective in control of symptoms. They are likely to produce side effects which can last for a period of time (eg sexual dysfunction in psychotic disorders). It is inappropriate to reassure the patient that he or she should not worry about side effects.

iii) **Disability even after symptom remission.** A proportion of patients can have some degree of deficits even after symptom remission. It is not proper to promise the family that everything will be alright after remission of symptoms.

What to reassure?

The doctor or counselor should reassure about issues he/she has control.

1) Doctor's best and sincere efforts, his availability during crisis, concern and help.
2) Patient's ability to get over the difficulties. Every patient's life history will contain instances of some successful struggle or other, however modest. These instances can be used for feedback to the patient to boost up his self confidence and morale.
3) Reassure after you have known every thing about the problem on hand.

How to reassure?

Methods used to convey the message of reassurance have to be learnt by practice and most of the doctors can get it by experience. Take all the facts into consideration and give a feedback to the patient and his family members. Reassurance means reaffirming facts after clinical examination. For example, a 25 year old man who is not a smoker or diabetic or obese develops anxiety symptoms. He feels that he has heart disease. You will reassure him that he need not worry only after detailed examination and evaluation of the results of examination.

Effective counseling has three stages or phases:

i) **Identifying the problem.** Symptoms are not problems; they are only manifestations of emotional difficulties. For example a lady complains

of headache for the last many years. She says that her headaches occur when ever she talks about alcoholism in her husband.

ii) **Feedback to the patient** about the relationship between the problem and symptoms. Enquiring further about the problem.

iii) **Helping to deal with the problem.**

Identifying the problem

First clue that the symptoms are related to stress is the onset of symptoms and life events. First elicit the onset symptoms in a chronological order and understand its relationship to life events or stress factors.

Doctor should always attempt to link the event and the onset of symptoms. Once a possible stressful event is elicited, further enquiries should be made to confirm it. E.g. if the headache had stared during summer 2 years ago , and if the doctor finds during the enquiry that the patient conducted daughter's marriage 2 years ago, then enquiries along the following line will confirm the presence or absence of the stress factor: **"When you conducted your daughter's marriage, did you have headache at that time? How many days/weeks before marriage, or how many days/weeks after that marriage did your headache start?"**

Feedback to the patient

Feedback to the patient about relationship between the symptom and stress is the next step. This feedback in the form of questions are better than statements namely; " Do you recognize that headaches started the day after you daughter's marriage", or "Do you agree that headache started the day after your daughter's wedding? And have you thought about it?" Most often patients deny such a relationship when doctor mentions it . Doctor should not worry or feel hurt that an important discovery is not accepted. Such denial only means that the patient is not yet ready to accept the relationship. However, by continuing the enquiry about the 'identified stress' one can eventually lead the patient to the underlying problem. E.g. in the above example, **one can ask the following probes** - "How was the marriage arranged? How did you manage the finance? Was everybody happy with the alliance? Did the marriage go on successfully?"

Helping the patient to deal with the problem

Enquire from patient the steps taken to deal with it, and its outcome. Enquire the patient about alternative strategies considered. What are the advantages and disadvantages of those alternatives? If inappropriate, doctor can suggest alternatives that are considered appropriate. Reinforce patient's inherent abilities to cope with problems, to boost confidence and morale.

Family problems: Frequently, the doctor during his management of a psychiatric patient will come to know that some family problems are operative in a given case. The principles of counselling outlined above should be used, but the following points must be kept in mind. **Avoid TAKING SIDES** among family members. If the patient complains to you about the spouse, then do not see the spouse separately. The other partner may complain to you about the patient or other family members e.g., mother-in-law. This approach will in no way solve the problem.

Preferably, see the concerned family members together. Be **objective, strict,** sympathetic and **neutral.** Also, **avoid** becoming a **judge** and passing judgements like wrong or right. The aim of counselling the family will be to make all the concerned family members understand the relationship between the nature of problem, its stress and the manifest symptoms, and the help the family members make joint efforts to get over the problem.

In helping individuals with psychological methods of treatment, it is important to remember that it takes time to see results. It is best to plan to see the patient and his family members on a regular basis for a few weeks. If at any time, during the counseling, patient or family seems difficult or you do not feel comfortable, or no improvement occurs after 12 weeks of therapy refer to a psychiatrist. In addition, refer patients to a specialist when you find that (i) it is not possible to identify stresses, or there are too many stresses, (ii) the support from the family members is difficult to obtain, (iii) the complaints have been present for many years, (iv) there are associated significant physical illnesses, and (v) your efforts are not providing relief even after seeing the patient for 8–12 weeks.

DRUG MANAGEMENT

Drug treatment for mentally ill persons is available only for about **Fifty seven years**. Chlorpromazine, the pharmacological agent for the treatment of severe types of mental disorders was the first drug to be discovered for use in psychiatric practice, in 1952. The discovery revolutionized the treatment for chronic and severe mental disorders and facilitated the discharge of large number of mentally ill persons from the custodial mental hospitals in Europe and America. Subsequent to the discovery and large scale use of chlorpromazine, a series of new pharmacological agents were discovered. Many of them are presently in use. The experience of last five decades has clearly demonstrated their usefulness and their relative safety.

The most commonly used drugs fall into three major categories; **1) Anti-anxiety drugs – Anxiolytics or Minor Tranquilizers 2) Antidepressants and 3) Antipsychotics – Major Tranquilizers.** These drugs may sometimes be used in combinations too. This section deals with the various pharmacological agents, their strengths, dosage ranges, side effects and management of side effects. The list is restricted to suit primary health care level of work.

1. Anxiolytics (Minor Tranquilizers)

Anxiolytics are effective for symptomatic relief of neurotic conditions; wherever symptoms of anxiety are present like sweating, tremors, palpitations, they also facilitate sleep. Their effectiveness as sole curative agents is however very restricted to those conditions where the anxiety symptoms are of a) very recent origin, b) the patient has in the past shown ability to cope adequately with stress, and c) there are no severe and prolonged interpersonal / familial problems. In all other cases, the role of anxiolytics is limited, and the management must necessarily include counseling and family education. In such cases if symptoms of anxiety are severe, anxiolytics can be used only as adjuncts to other modes of management.

Table 13. Commonly used anxiolytics

Name of the Drug	Tablet strength	Daily dose per day
Diazepam	5mg	5-15 mg
Nitrazepam	5mg	5-15mg
Lorazepam	5mg	1-3mg
Chlordiazepoxide	10mg	10-30mg
Alprozolam	0.25, 0.5 and 1 mg	0.25-3 mg
Propranolol	40mg	40-80 mg

Diazepam should not be given more than 15 mg per day as it can cause drowsiness, lethargy and ataxia.

(**Intravenous diazepam** is very effective in cases of status epilepticus. The injection must be given **slowly, 10 mg of diazepam over 3 minutes.**)

Hypnotics should be used **sparingly.** They facilitate sleep in conjunction with antidepressants in cases of severe insomnia. The word 'sparingly' is deliberately emphasised because (a) prescription, merely of an hypnotic to an insomnic person, will do nothing to his problems which are causing insomnia and there is danger of the individual **developing addiction**. If this happens doctors will be contributing to the individual's escape from healthy and legitimate responsibilities, (b) in majority of instances, insomnia will automatically set itself right either when the underlying problem is adequately dealt with or when anxiety or depression is treated.

Pharmacological name of a useful hypnotic is **Nitrazepam. Concomitant use of alcohol and hypnotics will cause excessive drowsiness and should be avoided.**

2. Antipsychotics ('Major Tranquillizers')

Antipsychotics are effective in the treatment of psychoses like schizophrenia and mania. It is also useful in those cases where depression

is also present, when psychotic symptoms are also present alcoholic psychoses, and in organic and epileptic psychoses.

Table 14. Commonly used anti-psychotics

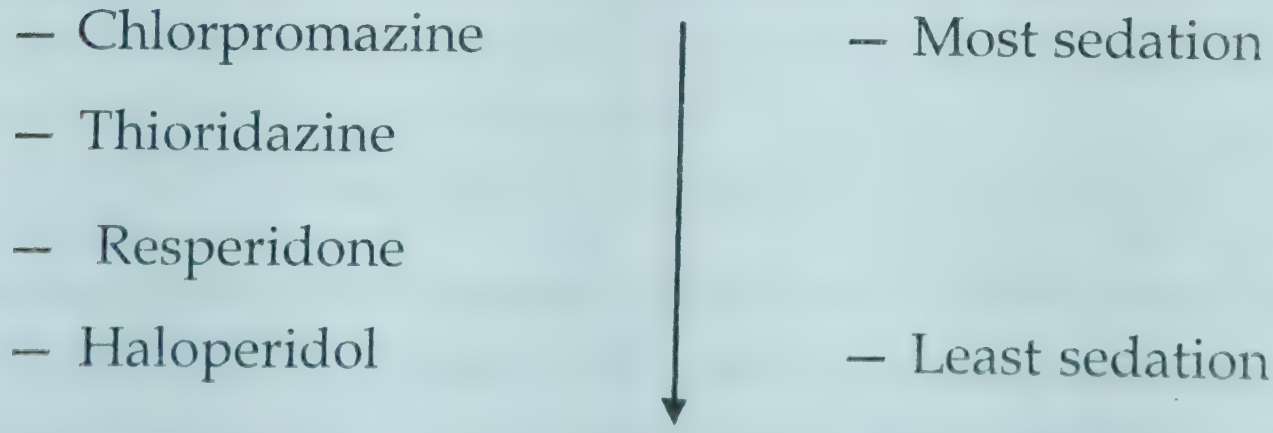
Name of the drug	Strength	Dose per day
Chlorpromazine	25, 50, 100 and 200 mg	200-400 mg
Resperidone	1,2,3 and 4 mg	4-6 mg
Haloperidol	1.5, 5and 10 mg	5-15 mg
Fluphenazine Deconoate	25mgs per ml	25 mg every 15 days

Note: The maximum therapeutic dose mentioned above should not be given in the outpatient setting. In case of Depot Phenothiazine: (a) it is used generally as a maintenance medication for **schizophrenic psychoses–chronic type,** (b) the dose is adjusted by altering the interval, and giving between 0.5 ml and 1 ml.

All antipsychotics available are equally effective when used in equivalent dosages. It is best to become familiar with one antipsychotic (chlorpromazine or resperidone) and use it as first level drug.

These antipsychotic drugs have differing degrees of **sedative effects,** and this can be made use of to meet special clinical requirements like (a) when severe insomnia is a predominant problem and (b) the patient has to attend work during day time. The sedative effect of the drugs is mentioned in decreasing order.

Figure 9.



The differences are related to sedation and the variation in the incidence of side effects. Some patients whose symptoms fail to respond to one of the drugs will respond to another. The reason for this is related to blockade action on various types of dopamine receptors.

SIDE EFFECTS

The following are the side effects of the antipsychotic drugs:

(i) Minor **and transient:** They usually disappear spontaneously after 2-3 days of treatment. These are dryness of mouth, blurring of vision and drowsiness.

(ii) (a) Extra **pyramidal side effects**

Acute dystonic reaction: Sudden muscular contraction, most often in neck, tongue and pharynx, presenting as occulogyric crisis, laryngeal spasm or as protrusion of tongue against clenched teeth. One of the commonly used drugs in general practice trifluprомazine, (siquil) frequently causes this reaction. **Dystonic reactions occur in about 10% of patients and manifest with in 72 hours of starting medication**. Acute dystonic reactions can be quickly relieved by 50 mg of IM promethazine or I.V. diazepam given slowly.

Drug induced Parkinsonism: The features are excessive salivation, tremors, rigidity and mask-like face. **EPS occurs in 15-20% of patients and manifest after one week of treatment.**

Akathisia: It is a condition of motor restlessness, often accompanied by mental restlessness, namely, the patient cannot sit or stand at one place quietly for more than a few seconds and is distressed. It is a rare side effect seen several months after starting medication.

Acute dystonia and extra pyramidal symptoms can be treated with antiparkinsonian drugs. If the patient is on antiparkinsonian drug already the dose will have to be increased. Antiparkinsonian drugs should be continued till the extrapyramidal symptoms disappear.

(b) **Tardive dyskinesia (TD):** The clinical feature is one of bucco-oro-facio-lingual movements, almost continuously seen in wakeful state. There can be classical 'fly-catching' movements of the tongue and grinding of

the teeth. This usually occurs 6 months after treatment. TD is seen in about 10% of patients. This distressing side effect is difficult to treat if it is not identified early. Reduce the dose of medication and stop THP soon after identification of TD. Add diazepam 5-10 mg per day in addition to antipsychotic medication. The occurrence of TD can be decreased by careful and limited use of antipsychotic and anticholinergic drugs. It is preferable to stop THP after three months of treatment. Anemia, brain damage, tobacco and other substance use can increase risk of developing TD. Refer the patient for evaluation if TD persists after the above-mentioned treatment.

(c) **Jaundice:** A very rare side effect seen with chlorpromazine. Stop drugs and immediately refer to a psychiatrist.

(d) **Postural hypotension:** A very common side effect seen with chlorpromazine in the first 4 weeks of treatment. This is a self limiting side effect which disappears gradually. Educate the patient to gradually assume erect posture from sleeping or sitting position. If the postural hypotension continues to bother the patient, try to reduce the dose or change the drug to resperidone.

(e) **Skin sensitivity** is common in fair people. Educate them to avoid sun light.

3. Antiparkinsonian agents

This group of drugs is effective for treatment of major tranquilizer induced extrapyramidal side effects. They should not be routinely used.

Table 15. Anti-cholinergic drugs

Name of the drug	Strength	Dose per day
Trihexyphenidyl	2 mg	2 to 6 mg
Procyclidine HCL	5 mg	5 to 15 mg

Table 16. Antidepressant drugs (tricyclic compounds)

Name of the drug	Strength	Daily dose per day
Imipramine	25, 50 and 75 mg	75-150 mg
Amitryptaline	25, 50 and 75 mg	75-150 mg
Chlomipramine	25, 50 and 75 mg	75-150 mg

These drugs are effective against depression of any cause.

Table 17. Newer anti-depressants

Name of the drug	Strength	Daily dose per day
Fluoxetine	20 and 60 mg	20-60 mg
Sertraline	50 and 100 mg	100-150 mg

Newer drugs- Same potency but side effects are less compared to older drugs. Drugs should always be taken in the day time.

Note: A higher or single night dose is preferable and equally effective when the patient can tolerate without side effects.

The therapeutic benefit becomes obvious, on an average, 14-21 days of starting of treatment. Therefore, it is essential to advise the patient to take the drug for a minimum period of atleast 3 weeks before considering any change.

Imipramine causes least sedation. The following are the common side effects – dryness of mouth, blurring of vision, constipation. Rarely, **impiramine** can cause retention of urine and paralytic ileus when drugs have to be stopped immediately.

It is essential to advise the patients about these possible transient side effects so that they are prepared if they experience them and do not stop the

medication. Antidepressants can cause nausea or vomiting when stopped abruptly.

Antidepressants are to be used with extreme **caution** and in consultation with the psychiatrist in patients with **glaucoma, recent myocardial ischaemia and enlarged prostate. Refer- power point slides in the appendix for further information.**

4. Prophylactic Lithium and Carbamazepine

Lithium carbonate is effective in treating cases of mania and it is widely used in preventing recurrent manic depressive psychoses. **The initiation of prophylactic use of the drug is best left to the decision of a psychiatrist because of the need to do base line investigation like thyroid and renal function tests in addition to ECG**. The primary care doctor can effectively provide the maintenance care. The most commonly used dose is 900-1200 mg per day in three divided doses. Because the therapeutic and toxic levels are close to each other the lithium levels are monitored by periodic **serum lithium estimations.** The therapeutically effective serum lithium level is 0.6 to 1.2 mEq/l (or milli mols\l). Beyond 1.5 mEq\l toxic effects manifest in the form of abdominal discomfort, nausea, vomiting, diarrhea, tremors of hand, drowsiness. If they occur, the drugs must be immediately stopped and the patient referred to a psychiatrist. Lithium toxicity is an emergency situation. Carbamazepine (Tegretol) in the dose range of 400 to 800 mg is also useful as a preventive drug in M.D.P.

DRUG INTERACTION

Patients with psychiatric problems may need to take other drugs for other health problems. The following are some of the guidelines about drug interactions. However, if there is difficulty in regard to management of associated physical problem, it is appropriate to take the help of a psychiatrist.

Table 18. Drug interaction between anti-depressants, anti-psychotics and anti-convulsants.

Psychotropic drug	Other drugs	Interaction
1.Anti-depressants		
Imipramine	Cimetidine	Toxicity due to high levels
	Ranitidine	No change
	Dextropropoxyphene.	Toxicity due to high levels of IMN
	Oral contraceptives	Toxicity due to high levels of IMN
Amitryptaline	Furazolidine	Toxic psychosis
	Disulfuram	Acute confusion and alcohol disulfuram reaction
Fluoxetine	Erythromycin	Acute confusion
	Diazepam	Excessive drowsiness
	Alprozolam	Excessive drowsiness
	Phenobarbitone	Toxicity
	Nifedipine	Increase in side effects of nifedepine
	Carbamazepine	Toxicity of carbamazepine
	Lithium	Toxicity due to high levels of lithium
	Diphenylhydantoin	Toxicity of Diphenyhydantoin
	Cyproheptidine	Reverses antidepressants action
	Haloperidol	Severe extra pyramidal symptoms
2.Anti-psychotics		
Resperidone	Carbamazepine	Decrease in blood levels of RSPN
	Chlorpromazine	Increase in effect of RSPN
	Haloperidol	Increase in effect of RSPN
	Propronolol	Increase in effect of RSPN
	Imipramine	Increase in effect of RSPN
	Lithium	Lithium toxicity
3.Anti-epileptics		
Phenobarbitone	Furesimide	Phenobarbitone toxicity
	Paraetamol	Decrease analgesic effect
	Anti-diabetics	Rapidly metabolised
Diphenyl Hydantoin	Co-trimoxozole	DPH toxicity
	Cimetidine	DPH toxicity
	Dextropropoxyphene	DPH toxicity
	Diltiazem	DPH toxicity

	Disulfuram	DPH toxicity
	Ibuprofen	DPH toxicity
	Isoniazid	DPH toxicity
	Metronidazole	DPH toxicity
	Omerperazole	DPH toxicity
	Antacids	DPH is not absorbed
	Combination of ATT	DPH toxicity
	Phenobarbitone	DPH levels decrease
	Rifampicin	DPH levels decrease

In addition, antacids when taken together, delay absorption of the phenothiazines. Both antidepressants and chlorpromazine are liable to precipitate epilepsy in known epileptics because they reduce the seizure threshold. Oral contraceptives are known to cause depressive symptomatology in some women. Alcohol when taken with most drugs described in this chapter enhances the depressant effect on CNS. In view of this, **a person on psychiatric drugs should be advised to avoid taking alcohol.**

ROLE OF THE FAMILY AND MENTAL HEALTH CARE

Family is important in mental health care at many levels. For healthy development of the child, a protective and nurturing family is vital. In times, of crisis, family members form the first level of buffers, care providers and emotional support. In majority of the mental disorders, the involvement of the family contributes to better outcome. In recent times, special efforts to educate and support the families with mental disorders are getting attention and that forms an integral part of care. Doctors should take time to understand the strengths of the family, needs of the different family members, educate them about the illness and involve them as partners in care. In conditions where the illness is due to family situation (e.g. Hysterical neurosis) therapy should be directed towards family interaction.

REHABILITATION

The management of mentally ill persons can be considered complete and satisfactory only when the patient is helped to successfully reintegrate

into the family, work and the community life. In addition to psychological and pharmacological management, certain additional steps will have to be taken to help the patient to gain skills and competence in personal, social and occupational activities. These approaches are often referred to as social therapy and rehabilitation. It may involve attempts to modify patient's life situations, motivation to work and sorting out family member's difficulties. Activity may be physical, mental, social, and recreational or job oriented. For example, physical activities like doing some work , engaging in exercise and carrying out daily routine; mental activities like making plans and taking decision for the future, controlling behavior, thinking and reasoning; social activities like talking to friends, relatives, attending religious and social functions, visiting religious places and taking part in group activities, job oriented activities like office work, agricultural and other manual work and recreational activities like engaging in singing, going for picnics, cinema and taking part in games.

Most of these activities are part and parcel of day-to-day life of an individual. These activities generally go on without any effort in normal people. **In the case of mentally ill persons, disability hampers these activities to varying degrees.** Patients can be disabled to carry out the physical activities; they may have difficulties in thinking, reasoning and decision making. The social and recreational activities are very much affected and patients can exhibit socially undesirable behavior. Thus, patients tend to become dependent on the family most of the time. Thus, responsibility on the family members and on the community increases to make these persons as independent as possible.

It is important for the medical team and other carers to understand the importance of **re-establishing or regaining the interests to do useful activity** and thereby modifying behavior from useless to useful activity, non productive to productive activity, destructive to constructive activity and asocial to social activities. These activities help the patient to become a useful member of the family and society, thus rehabilitating to lead an independent life to the best extent.

The word **rehabilitation means re-building of the activities like physical, mental and social,** which prepare patients to take their place in the

community to the fullest extent compared to the level of their functioning before the onset of the illness, and become an asset rather than a liability to themselves and to their families. Proper supervision, constant reinforcement and encouragement, are very essential in the initial stages. Persons involved in caring for such patients need patience, self-awareness and devotion to work. Family and neighbors need to understand the patient's potentialities and capabilities before involving the patients in any type of activity. Interest cannot be forced but interest can be instilled. Choices have to be given to the patients in selection of the activity or task. Patient should be respected as an individual. Continuous support and encouragement to the patient is very essential to boost his morale and self-esteem. Gradually, when the patient develops skills to do the work or activity assigned, he/she should be allowed work independently. In the long run efforts need to be made to shift the patients for alternative work in private and public sectors like industries and other vocations which will be of great use to the patients to lead independent lives in the society.

The goal of any treatment plan should be rehabilitation and reintegration of the patients to active community life. For successful rehabilitation, cooperation and collaboration of health care personnel, patients and their family members, opinion leaders and various agencies are valuable.

PSYCHIATRIC EMERGENCIES

Psychiatric emergencies are any psychiatric conditions or circumstances of a patient which call for immediate action. Here, the decision as to what is to be done to the patient has to be taken. It is important to note that about 10% of severely mentally persons need hospitalization at some point in time during their illness. A psychiatric condition will present as an emergency, usually due to one or more of the following reasons: i) patient may be a source of danger to himself or others because of the mental state (excitement or withdrawal), ii) patient is acutely disturbed due to intoxication or adverse effects of drugs, iii) patient may create disturbance in the community to an intolerable or unmanageable degree and iv) patient may be in extreme distress and lastly, patient may be brought with hysterical conversion or dissociative attacks.

Approach to a psychiatric emergency

History taking, however brief it may be, is very essential. Inquiry should be made regarding the possibility of any precipitating factors. A thorough examination of the patient including measurement of blood pressure should be done. Examination of the patient should preferably be in private, except in cases of excited patients, in order to give the patient a chance to talk about any distressing issues. Avoiding restraints as far as possible will be useful. Doctors should not deny the reality to the patient's experiences. Doctor must try to express respect for the patient by direct verbal reassurances and his interest in the welfare of the patient. The following are psychiatric situations that can be considered as emergencies;

List of psychiatric emergencies

1. **Suicidal attempt**
2. **Excitement**
3. **Stupor**
4. **Dystonic reaction**
5. **Lithium toxicity**
6. **Hysteria**
7. **Drug withdrawal states**

1. Suicidal threats, gestures, attempts and risks

Suicidal attempts or threats are a sign of significant psychological distress. No suicidal threat, gestures or attempts should be taken lightly. The assurances of the patients should not be taken for granted. There are no definite and fixed criteria to differentiate between serious and not serious attempts. An over dosage of drugs or consumption of poisonous substance is seldom accidental and at times it is with suicidal intent. Frank admission of suicidal intent by the patient can be relied upon, but never the denials. It is desirable (and not harmful) to discuss openly about the risk of suicide \ suicidal attempt with the patient and the relatives. The following suicidal situations, namely a) suicidal attempts with farewell or other notes, b) many

suicidal attempts, c) suicidal attempts with more lethal methods, d) past history of suicidal ideas and e) elderly patients should be considered as real suicidal attempts.

Management: It is not safe to leave the patient alone and the co-operation of the family members should be sought to ensure sympathy, supervision and support to the patient. Referral to a psychiatrist and admission is indicated, if family members are not confident of looking after the patient. When psychiatric help is not easily available, treat the underlying psychiatric disorder either with drugs or psychosocial intervention or both.

2. Excitement

Excitement may be due to a) functional psychiatric illness like schizophrenia or mania, or sometimes post-partum psychosis, b) organic brain disorders caused by various CNS or systemic illnesses. When the excitement is due to either **schizophrenia or mania,** it may be the first episode or relapse illness. Behavioral abnormalities and sleep disturbances often predate the onset of psychotic symptoms. Usually there is no evidence of confusion or disorientation or alterations in the state of consciousness. The clinical picture of **acute brain syndrome or delirium** would consist of **fluctuations in the level in consciousness, disorientation, inability to concentrate, impairment of memory in addition to other features like restlessness, agitation, disturbances of sleep, slurred speech, irritability and unexplained fear. Behavioral disturbances are more in the night compared to day time.**

Management: Excited patients generally carry the risk of self-neglect, exhaustion and nutrition problems. If the patient is too excited to be without an escort, it is always advisable to choose an escort who has not physically restrained the patient before, because excited patients generally tend to be uncooperative with those who have physically and forcefully restrained them earlier. However, one should not hesitate to take whatever precautions a situation may demand. For example, when dealing with a physically violent patient, it is safe to be out of his arms reach except while giving injections, and always assume a position in front of him. If the patient expresses hallucinations or delusions, accept it and do not argue.

The primary task in any excitement **(except head injury)** is **sedation.** Chlorpromazine 50 mg as IM injection or Haloperidol 10 mg IV would be an ideal choice and should be given immediately. It can be repeated as injection of 50 mg at six hourly intervals (upto a maximum of 200 mg) if necessary to control the patient. Later tablets of 100 mg should substitute the injection. Chlorpromazine given orally (300 to 400 mg per 24 hours can be sufficient). Fall of BP as side effect of Chlorpromazine should always be kept in mind.

Following head injuries, do not give any sedative drug to the patient. Always admit for observation or refer to a hospital. In treating the patient with acute brain syndrome, the underlying physical condition should be determined and energetic treatment for the same should be started as promptly as possible. Chlorpromazine in dosage of 50-150 mg orally or Haloperidol 20-30 mg in divided doses can control the behavioral disturbances.

3. Stupor

This can be either a **schizophrenic stupor or a depressive stupor**. Though the patient is conscious, he does not respond to environmental cues, total absence of self-care, neglecting physiological needs like food, fluids and almost total motor inactivity. These two conditions are emergencies because there is a risk of neglect of nutritional needs of the body. Referral to a psychiatrist for in patient care is essential.

4. Dystonic reaction

The commonest side effect is extra pyramidal symptoms in the form of acute reactions like spasm of the muscles, especially of neck and face with difficulty in swallowing, manifesting as torticollis and/or occulogyric crisis which is very distressing to the individual. **Dystonia occurs within 48 hours after starting antipsychotic medication and it is known to occur in about 10% of patients.**

Management: For immediate relief, Promethazine (phenergan) 50 mg intramuscularly (IM) is given. Add antiparkinsonian agents orally, like

trihexyphenidyl hydrochloride 2 mg twice or thrice daily. If the symptoms do not subside increase the dose of trihexyphenidyl.

5. Lithium toxicity

Lithium toxicity occurs in those patients who are on maintenance treatment with prophylatic lithium. These patients may be attending follow up at your primary health centre. Keep a watch on such patients and look for toxicity. If the patient develops coarse tremors, severe vomiting, diarrhea, drowsiness, ataxia, altered sensorium, seizures and coma, immediately refer the patient to the psychiatrist after stopping the drugs.

6. Conversion reaction

Acute conversion reaction can present to your clinic as an emergency. Relatives bring the patient distressed with the sudden onset of symptoms. A thorough examination of the patient, to make sure of the diagnosis, and also to alleviate the anxieties of the relatives is essential. Reassure the patient and the relatives that there is not danger to life and then proceed according to the clinical needs using the guidelines given.

7. Drug withdrawal states

Alcohol is the most common drug abused in the community. Persons abusing alcohol can stop using it for various reasons. Most often it is due to physical ill health. These patients can develop withdrawal features and subsequently develop delirium. Refer to chapter on Alcohol Abuse for recognition and management.

HOSPITALISATION

Primary health care settings in India have limited facilities in keeping with the objectives of primary health care approach to care. Usually the number of beds available is 6-12 at the primary health centres. These are utilized for acute physical problems like severe dehydration or delivery of women. Hospitalization of psychiatric patients is generally considered impossible by the personnel. However, experience of training medical officers, have shown that on many occasions, doctors have hospitalized

patients for short period of time. They have found hospitalization feasible with available resources. This section deals with these situations and how to provide care and organise the services in the hospital.

There are **Three types** of clinical situations where hospitalisation is appropriate, namely,

(i) Psychiatric **emergencies:** Conditions like status epilepticus, severe degree of extrapyramidal symptoms, severe excitement and acute conversion symptoms, can be hospitalized for few hours to couple of days. An attempt can be made to manage the patients in the PHC before considering referral to bigger health facility. Management of these conditions is considered in the earlier section. The general approach in these situations would be to see the patient every half to one hour and assess the progress, ensure that a relative is always staying with the patient. It is necessary to maintain a simple record for patients hospitalized. The records should be sent to the referral hospital in case the patient needs higher level of care.

(ii) To **initiate intensive treatment:** In patients where hospitalisation would be ideal (acute organic psychosis, mania, depressive stupor, suicidal patient, post epileptic psychoses, psychosis following child birth, psychosis with physical problems like diabetes or hypertension), often doctors will find that relatives do not want to go to a bigger hospital or they would like the doctor to treat the patient locally. Initially a PHC doctor may feel that it is not possible to do anything.

However, experience has shown that primary care doctors can admit such patients for **few days** in the PHC facility and provide treatment. The purpose of this hospitalisation is to administer the drugs under supervision, to adjust the dosage from day-to-day, to monitor the side effects or any adverse reaction, to prevent harm to patient or others. When hospitalised, patients can get parenteral medicine (chlorpromazine) to control psychotic symptoms. In any hospital facility use of chlorpromazine 50 mg IM every four to six hours will be possible. With this regime most acutely disturbed patients can be controlled in 2-4 days. In addition, the few days in the hospital setting will also convince relatives about the usefulness of medical help and they get

convinced about treatment and further follow up as advised by the doctor. The safety precautions mentioned in the section on psychiatric emergencies apply here. It has also been noted that doctors experienced in managing patients in their own settings feel so comfortable that there is very little need for referral to a psychiatric centre for most patients seen at primary health care.

iii) **Hospitalization for diagnosis:** This becomes important in situations where the information available at the OPD level both from relatives and an examination is not adequate for arriving at a diagnosis. Some examples are differentiation between conversion fits and epileptic fits, depression and schizophrenia, doubts about organic psychosis, occurrence of side effects which are unusual. In these situations short admissions and observations will clarify the problem. Such efforts from the doctor will save the patient's visit to a specialised psychiatric centre and also increase his popularity and credibility in the local area.

The above experiences are given to share the wider role a medical officer can play to meet the total needs of the **rural** population. Once the doctor starts utilizing all the facilities that are available, it goes without saying that comprehensive care can be provided at the PHC itself. However, it is advisable to have an active referral link with the nearest psychiatrist.

LEGAL ASPECTS OF PSYCHIATRIC PATIENT CARE

Unlike persons with other medical problems, persons who have mental disorders come under some special legal provisions. The current law is the Mental Health Act, 1987 (MHA, 1987) which regulates the admissions and discharges to psychiatric hospitals. In addition there are civil rights and criminal responsibilities related to mentally ill persons.

In regard to admission to a psychiatric hospital, patients can be admitted in 3 ways, namely:

i) **Voluntary admission:** where an adult patient gives in writing his desire to be admitted and treated for mental illness. The medical officer in charge of the psychiatric hospital admits such patients and they can be discharged at any time and within 24 hours of request from the patient.

ii) **Admission under special circumstances:** Any mentally ill person who does not, or is unable to, express his willingness for admission as a voluntary patient, may be admitted and kept as an inpatient in a psychiatric hospital or psychiatric nursing home on an application made on his/her behalf by a relative or a friend. The medical officer in charge should be satisfied that in the interests of the mentally ill person it is necessary to do so. No person so admitted as an inpatient shall be kept in the psychiatric nursing home as an inpatient for a period exceeding **ninety days**. Every application shall be in the prescribed form and be accompanied by two medical certificates, from two medical practitioners of whom one shall be a medical practitioner in the service of Government, to the effect that the condition of the mentally ill person is such that he should be kept under observation and treatment as an inpatient in a psychiatric hospital or psychiatric nursing home.

iii) **Admission by reception order:** Under this procedure a relative of the ill person makes a petition to the magistrate for a reception order. This request has to be in a specific form, which also includes a certified photograph of the patient, supported by two medical certificates, of which one of them is by a gazetted medical officer. The medical officers independently certify that they have examined the patient and given reasons why it is opined that the person is mentally ill and fit to be admitted to a psychiatric hospital. The magistrate after receiving the request, medical officers' certificates and seeing the patient can issue a reception order for admission to a psychiatric hospital. These patients are discharged by the medical officer in charge when a relative gives in writing his willingness to look after him once discharged or on recovery.

Severely mentally ill patients refusing treatment or refusing to come to the PHC can be recommended for hospitalization after obtaining reception order from the magistrate. It is important to educate families about this possibility.

iv) **Admission of wandering mentally ill:** Police personnel can initiate action on identifying this category of persons and through the magistrate admit them to a psychiatric hospital.

Some special provisions cover mentally ill persons, involvement in civil and criminal situations. Issues of marriage, divorce, sale-purchase of property, ability to contest an election, involvement in a crime is considered differently.

In view of the special situation regarding persons with mental disorders, three aspects are important. Firstly, to maintain **detailed and regular records** of all contacts and observations. Secondly, to maintain total **confidentiality** of the information obtained as part of therapy contract. At no point should personal details be provided to other persons not involved in the patient's problems and treatment. One of the aspects of confidentiality is to keep the records in a safe place and not to discuss illness details in front of others. Thirdly, to be careful while assessing persons when legal reasons are the main reason for contacting you. In such cases it will be best to refer them to a specialist.

11. Implementation of Mental Health Care in Primary Care Settings

INTRODUCTION

As outlined in the National Mental Health Programme for India (1982) the approach to organise services for the mentally ill is to use public health care approach.

(1) Diffusion of mental health skills to the periphery of the health service system.

(2) Appropriate appointment of tasks in mental health care.

(3) Equitable and balanced territorial distribution of resources.

(4) Integration of basic mental health care into general health services and

(5) Linkage to community development.

The implementation of the mental health care programme requires the leadership of the medical officer as the leader of the primary health care team. It is important that every person in PHC gets involved in the care of the mentally ill persons. As different categories and levels of personnel are involved it is the medical officer who is the coordinating person.

The role of the MEDICAL OFFICER is to provide skills to the team members, ensure supplies, support, encouragement and supervise their work and initiate community involvement. To be more specific, the medical officers will provide treatment for the ill persons, monitor the work of the health personnel, becomes a link with more specialised services.

The responsibilities of the different categories of health personnel in mental health care are as follow:

Community health guides- Tasks

1. **Identification of cases in the community.**
2. **Referral of identified cases.**
3. **Mental health education.**

Multipurpose health workers-Tasks

1. Identification of cases.
2. First aid.
3. Referral.
4. Follow up.
5. Mental health education.

Health assistants (Health inspectors and lady health visitors) - Tasks

1. First aid.
2. Mental health education.
3. Supervising the health workers.
4. Facilitation of home based rehabilitation.
5. Mobilization.

Pharmacist-Tasks

1. Mental health education.
2. Maintenance of drug stock.
3. Compiling the data regarding drugs.

Staff Nurses-Tasks

1. First aid.
2. Nursing care of out patients and in-patients.
3. Mental health education.

TRAINING OF NON-MEDICAL STAFF IN MENTAL HEALTH CARE

The medical officer should train all the non-medical personnel working in primary health care institution so that they become part of the management of mentally ill. The training can be done easily during the monthly conference (or if possible, special classes can be arranged). Basic information about causes, clinical presentation, treatment of mental illness, mental retardation and epilepsy should be given periodically. Emphasis

should be made on early identification, referral and follow-up. Medical officer should demonstrate a few cases to health workers periodically. Manuals for the different categories of the health personnel are available.

For your convenience, the section on responsibilities of health workers is included as Appendix I in this manual. You can adopt this to suit your local needs and as a teaching aid. Possibility to translate this in local language and distribute them could be most considered. (Kannada and Hindi versions are available from NIMHANS).

REVIEW OF THE PROGRAMME IN MONTHLY MEETINGS

Medical officer should enquire about each worker's contribution regarding identification, referral, follow up of psychiatric patients and mental health education. It is best to review the progress in mental health care sub-centre wise every month. The report presented by the health workers subcentre wise is the basis on which problems are discussed. If there are problems, appropriate measures should be taken to solve them with the help of supervisory staff. The common problems are:

a) **An identified patient does not come to the clinic in spite of health workers effort:** After enquiring the details of the efforts made by the workers, doctor can ask the supervisory staff to visit the patient's family of if needed doctor himself can do that and show them how the patient and family can be convinced to come to the clinic. Often the support of community leaders will be of great help in such situations.

b) **An irregular patient or a patient who has dropped out from treatment:** In every meeting, the medical officer should enquire about patients who are irregular or dropped out from treatment and initiate specific efforts to see that all ill persons get full treatment.

SUPPORT AND SUPERVISION

Patient is referred to the clinic by the field worker: When the patient or his family members report that the health worker has referred them to the clinic, the medical officer should honor such referrals and appreciate the work done by the health worker. He should give credit to the worker so that

the credibility of the worker is increased in the community. Medical officer should check the referral slip sent by the worker. After examining and initiation of the treatment, doctor should tell the patient and family about the treatment and ask them to contact the health workers for additional help and guidance regarding the management of the patient. Information regarding the patient's illness and management should be given to the health workers at an early date through their supervisors.

Irregularity of treatment by a patient: Health workers are asked to find out the reasons for the same. The reasons may be side effects of the drugs, fits not being controlled in spite of medication and family members losing faith in the drug, patient not willing to take drugs, difficulties in coming to the hospital like distance, poverty, etc., family members trying traditional methods of treatment. The health workers and supervisory staff should be instructed to make a few more attempts to convince the patient and the family members to come regularly for follow up. Medical officer should take appropriate measures to overcome these difficulties as outlined earlier by mobilising community resources.

Medical officer should recognise the good work done by health workers and encourage everybody to contribute to the care of mentally ill. If necessary and wherever possible medical officer should make home visits and demonstrate to the health workers how to convince them to accept the treatment.

Records and reporting: The medical officer will be maintaining a simple case record of patients whom he treats. He will collect data regarding the work of health workers with the help of supervisory staff. He should prepare a monthly report regarding new cases identified, number of patients on treatment, number of cases dropped out, drug position in the clinic and submit the same to District Health Officer (DHO, CMO) during the monthly conference at district headquarters. He should discuss the achievements and difficulties of implementing the programme.

MENTAL HEALTH EDUCATION

Systematic studies and experience of providing mental health care in the community has shown that there are large numbers of misconceptions in

the community. Of all the health problems seen in the community, mental illnesses are poorly understood by the general public. This is one of the reasons behind people seeking non-medical help from healers, priests, and mantravadis and seeking refuge in places of pilgrimage.

Demonstration that mentally ill persons can recover to lead normal life after treatment is very important to make the community understand that mental illness is treatable. In addition, change in the community awareness about mental disorders is crucial to the success of the health programmes. With this in view, all efforts should be made to enhance the knowledge of all members of the community.

As a medical officer you can carry out mental health education by: ii) providing correct information and clarifying wrong beliefs and practices in the patient-family-doctor contacts in the clinics. (ii) Utilizing the mental health education material in this manual as a topic in your community meetings. For example as an additional topic in the orientation training camps (OTC) along with family welfare information (iii) Reviewing mental health education activities along with other health activities in the monthly meetings of the PHC .

In addition you would be receiving pamphlets, charts, films for distribution among the public. As the leader of the health team you have both the responsibility and opportunity to bring about changes in the community and health personnel and bring new hope for the long neglected mentally ill individuals in the rural areas.

RESPONSIBILITIES OF HEALTH WORKERS

How can you help the mentally ill and disabled in your community?

Please note that there are several mentally ill and disabled persons in the community. Most of them do not get any meaningful treatment, as a result, the ill person and his family members suffer. You are likely to come in contact with them while carrying out your routine health care activities. If you can assist in delivering mental health care to those in need of it, most of them can improve and become useful members in their families and community.

Along with your regular health care responsibilities, you can do the following:

i. **Identify all the persons with mental illness and epilepsy in the population covered by you.**
ii. **Provide first aid in emergencies.**
iii. **Refer the identified patients to the PHC \ PHU doctor.**
iv. **Follow up these patients regularly.**
v. **Educate the family and community regarding care of these patients in the family.**

I. IDENTIFICATION OF PATIENTS IN THE COMMUNITY

You may already know some patients in your catchment area by now. They might have consulted you for some help or you could have known about them from some one else as part of your work. . You are likely to see many more of these ill persons as time passes by. It is important to actively identify such patients and encourage the families to seek help. This can be done using **KEY INFORMANT INTERVIEW METHOD. This means interacting with key members in the community who are likely to be contacted for help or advice after the onset of illness. They are teachers, village leaders, anganawadi workers, panchayat members,**

land lords in the village, educated youth, mahila mandals, and members of youth clubs, faith healers, traditional healers and temple priests. Sensitize them about various mental health problems and efficacy of currently available treatment. Also educate them that mental health care program is integrated as part of primary health care. Check with them whether any one in the village suffers from the below mentioned problems.

1. A person who talks nonsense and behaves in a strange manner.
2. A person who has become moody and withdrawn without any reason.
3. A person who claims strange experiences like hearing voices or seeing things others cannot hear or see.
4. A person who is abnormally suspicious of others and claim that some people are trying to harm them without any reason.
5. A person who has become unusually cheerful, crack jokes and says that he is very wealthy and superior to others when it is not really so.
6. A person who feels unusually sad and cries without any reason.
7. A person who talks about suicide or has made an attempt to kill himself.
8. A person who gets possessed by God or spirit or who is said to be the victim of black magic or evil power?
9. A person who suffers from fits or loss of consciousness and falls down.
10. A person who is dull and mentally retarded since birth.

Educate them that all these conditions are treatable in the PHU or PHC. Request them to refer such patients to you or to the hospital. Remind them about such problems every time you meet them.

(ii) When you visit **homes** enquire about people who are suffering from mental illnesses. Ask the above questions tactfully without offending the members and obtain information about such patients in that family, neighbourhood or among their relatives.

(iii) When you go to a **school** to carry out immunisation and other school health programmes, enquire from the teachers and students about children who get fits, who have behavioral or learning problems. Identify them, get details and refer them to a doctor.

(iv) When you carry out immunisation in **children** in the village, enquire from mothers about children who have limited mental abilities and have poor development. Thus you can easily identify mentally retarded children.

v) When you do the follow up of persons who have **undergone family planning operations** look for those who have multiple bodily symptoms and those feeling unhappy for trivial reasons. These can be due to emotional problems. You can identify depressive illness in this manner.

As noted above you can identify mental patients during your routine work with little extra effort and be sensitive to those who contact you for other problems. When you identify a patient, do the following:

(1) Talk to the family members and encourage the patient and family members to give a detailed account of the symptoms, its duration and severity. Get details about patient's talk and behavior and how it has affected others in the family and community.

(2) Find out how the illness started - whether sudden or gradual - was there any precipitating event like fever, fits, head injury, quarrel, loss or any other problem?

(3) Check specially whether the following symptoms are present

a) Sleep disturbance

b) Poor appetite \ irregular food intake

c) Disinterest in work or being absent from work.

d) Not attending \ maintaining personal hygiene

e) Disturbed relationship with family members and others

f) Exhibiting behavior which is harmful or troublesome to others like being abusive, assaultive, suicidal or homicidal.

g) Any bizarre or socially unacceptable behavior like undressing in public, collecting rubbish, wandering aimlessly.

(4) What have the family members done to reduce distress in the patient? What treatment has been given and what is the result? What do they think about the illness and the patient?

Fill up the simple record and follow up form.

Identify whether the patient is suffering from epilepsy, psychosis or mental retardation. **Decide whether it is an emergency or not** (Details of the type of problems which should be referred immediately to the doctor are given later on in this chapter).

Presentation of mentally ill

Mentally ill people can present in the following ways:

1. Irritable and excited
2. Dull and withdrawn
3. Suspicious (paranoid)
4. Confused
5. Person complaining of aches and pains
6. Attempted suicide

Excited patient

What can you do when you see an excited and restless patient?

1. Advise others not to talk or behave in a way that irritates or provokes the patient. Keep away individuals whom the patient does not like.

2. Do not confront (argue, scold) the patient or provoke him.
3. Try to gain his confidence by enquiring 'What are your problems? Why are you so angry? Who is troubling you? I am here to help you.'
4. When he calms down, see that he takes some fluids and food.
5. Try to convince him that he needs some medicines and it is better if he can come and see the doctor.

Withdrawn patient

What can you do when you see a patient who is dull and withdrawn?

1. Take time to talk to the patient.
2. Persuade him to eat something.
3. Enquire about how he/she feels like sadness or fear or disinterest.
4. Find out whether he feels like ending his life.
5. Convince him to take treatment from the health centre and take medicines.

Suspicious or guarded patient

You must be careful when you have to approach a suspicious patient who does not trust any one.

1. Be fair and honest. Do not tell lies or hide facts.
2. Do not question his beliefs or suspicions. Do not tell that his beliefs are wrong, baseless or false.
3. Allow him to talk about his beliefs and fears. Collect more information. Do not pass any judgment.
4. Draw his attention towards other problems like sleeplessness, decreased appetite, etc., and convince him to see the doctor and take medicines.

Patient with confusion

Confused persons do not recognize others, make errors in calculation and have poor memory.

1. Find out whether he had jerky movements (fits) of all limbs. Confusion could be related to an epileptic fit.
2. Find out whether he is a known case of diabetes or high blood pressure.
3. Enquire whether he has had a recent head injury or has consumed alcohol or used ganja or opium.
4. Tactfully find out whether he has consumed some drugs with an intention to commit suicide.
5. Examine to see if he is having high fever. **All confused patients should be referred to the health centre immediately.**

It is better to avoid giving anything to the patient by mouth (to drink/eat). Presence of strangers and unwanted disturbances around the patient should be avoided.

Patients with aches and pains

1. Enquire about any physical illness in the recent past
2. Listen to them carefully and ask them to talk about their family situation
3. Reassure them after a brief physical examination that aches and pains may not be related to identifiable physical illness
4. Suggest them to see the doctor as soon as possible.
5. Advice them that there is no need for tonics or injections

Attempted suicide

1. **Family members can call upon you for help with history of having consumed poison**

2. **Suggest stomach wash immediately and refer the patient to your primary health centre.**

3. **Continue to talk to the person after discharge from the hospital about life difficulties**

4. **Encourage the patients to take treatment regularly after evaluation for any identifiable severe mental disorders**

REMEMBER

- Do not promise the patient or his people that all problems can be sorted out quickly.
- Do not say that you will do everything. Do not make all the decisions for the patient's family.
- Do not criticize others. Do not blame anybody.
- See that family members make the important decision.
- If you are a male, do not interview a female patient alone.
- See that ill persons develop confidence in their abilities. Do not make people totally dependent on you.
- Reassure that you would do your best to help them. Let them not think that you are superman.
- Avoid half hearted attempts. Hard work gives good results.

II. FIRST AID

First aid in psychiatric emergencies

You may be in a situation where patients need urgent help but the PHC doctor is too far away or he is not available. Under these circumstances, you must offer immediate help. The following are the circumstances in which you can offer help.

When you see a violent or very excited patient

1. Keep some distance from the patient and try to find out from him the reasons for his anger and who are troubling him.
2. Take the help of a person in whom the patient has confidence.
3. If the patient is not in a position to listen to you, throw a blanket on the patient and hold him with help from others. Take him immediately to the hospital.
4. Do not use thread, rope or chain to restrain him. If necessary, use only a towel or long cloth to tie his hands.

When you see a suicidal patient

Whenever a patient threatens that he wants to kill himself, take his words seriously. See to it that someone is always with the patient till he is taken to a doctor.

1. Quickly find out the problem which made the patient to decide to commit suicide.
2. Talk to the patient so that he looks at you as a well wisher. Tell the patient that you will assist him / her to solve the problems.
3. Listen to the patient with sympathy and encourage him / her to talk about the problems in detail.
4. Take the patient to the doctor yourself or refer him to the doctor immediately, along with a relative.

Patient with continuous fits (Status epilepticus)

Sometimes, patients, usually children, get fits, continuously, one after the other. They may remain unconscious in between attacks. This is an emergency and fits have to be stopped immediately, otherwise it can lead to brain damage or even death.

Therefore if a child / person gets a second fit in a few minutes after the first, arrange for doctor's help immediately.

III. REFERRAL

Following the identification of the patient and giving first aid whenever necessary, you will refer the patient to the PHC as early as possible. Find out with the head of the family who can take decisions and entrust the responsibility of the patient to this person. You can accompany the patient to the hospital when possible. **Send a referral note to the doctor giving details that you have noted regarding your interaction with the family.** Provide all details of the place of treatment to the family like name of the place, and the person to be contacted and working hours of the centre.

During your next visit to that family, find out whether they consulted the doctor. If they have not done it, find out the reasons and encourage them to do so.

Refer the patient immediately to the doctor in the following conditions:

1. The patient is severely ill, violent or unmanageable at home.
2. There is history of recent head injury.
3. The patient has fever, severe headache, vomiting or fits.
4. The patient has attempted suicide and is still threatening to commit suicide.
5. The patient is getting fits repeatedly (more than 3 times a day or continuously).
6. Disturbed behavior has occurred following child birth.
7. Disturbed behavior occurring for the first time, after the age of 40 years.
8. Disturbed behavior in persons with known diabetes or high blood pressure.
9. Persons who show abnormal behavior after taking alcohol or any other intoxicating substance.

IV. FOLLOW UP

As part of the total management patient will be examined by the doctor. The nature of the illness is diagnosed and treatment is started. Due to any reason if the patient discontinues the treatment, all your efforts and the efforts of the doctor and family members becomes fruitless. Therefore during every visit you should meet the patient and the family members and enquire:

1. Whether the patient is taking medicines regularly as prescribed.
2. Whether there is improvement in the patient since treatment.
3. Whether he has developed any side effect with drug use.
4. Whether the patient has started working again.
5. Whether the patient has seen the doctor for follow up and review. Collect the above information in these areas. The following section deals with handling of problems that can come up during follow up.

1. Side effects

Different types of drugs are used for the treatment of mental disorders. Sometimes these may have side-effects which are unpleasant to the patient and he may give up the drugs. You already know about the kind of side effects these drugs are likely to produce. A first thing to do is to reassure the patient if the side effects are mild. However, remember to refer him to the doctor immediately if they are severe. **The doctor should carry out all the changes in the drug dosage.**

Drugs given to the mentally ill can result in mild side effects, which **are temporary, examples of this are, dryness of mouth, light headed feelings and constipation. When the patient complains of above, reassure him that it is temporary. Taking more water or keeping a piece of lemon or dry grapes in the mouth can help dryness of mouth.**

However, **severe side effects** can also occur. Examples of these are continuous light headedness, unsteadiness, stiffness of limbs, limbs getting pulled in different directions, twitching of tongue, mouth, neck or hand and

legs. At times he can have unclear speech, drooling of saliva. **If any of the above are present send the patient to the doctor immediately.**

Another problem is **drowsiness.** When a patient is very excited he is put on higher doses, if not reduced, he can have drowsiness. However the drugs should not be stopped. The patient should be taken to the doctor to reduce the medications suitably.

Patients who are **very sad and depressed** are given drugs which must not be stopped suddenly. If they are stopped suddenly, patients can experience nausea or vomiting. Relapse of depressive symptoms can occur if the drugs are stopped prematurely. Drugs should be gradually reduced after completing a specified duration of treatment. Antidepressant drugs take about three weeks to show its beneficial effects. Hence encourage the patient to continue medication regularly.

An **epileptic patient** is given a medicine, which can have the following side effects. They are, excessive sleep, slow mentation, difficulties in concentration and hyperactivity. Drug toxicity can manifest as unsteadiness in gait, headache, slurring of speech and diplopia. Ask him to see the doctor immediately.

REMEMBER

- Tell the patient to take drugs as prescribed by the doctor.
- Patient should not make any changes in the dose without consulting the doctor.
- If patient has any difficulty or doubt regarding the drugs, he should consult the doctor.

MENTAL HEALTH EDUCATION

Of the many health problems, mental illnesses are poorly understood by the general public. This has been the reason for people to seek non-medical help from healers, priests, and mantrawadis and to visit places of pilgrimage for remedy. People using these methods do not help the patient recover from illness and as a consequence of delay in treatment results in chronicity, disability and burden on the families. Experience in mental health care in the community suggests that families give up exploring medical care for the patient because of persistence of symptoms and disability. **Therefore it is important to note that early treatment helps in faster recovery.**

Since the belief that mental illness is due to supernatural causes are prevalent for a long time, they cannot be changed in a short period of time. In addition, these beliefs are firmly held by even the educated and the leaders of the community, change takes some time. One effective method available to make the community understand that mentally ill persons can be treated and that they can lead normal life like any one of us after treatment is to bring mentally ill individuals into treatment. Based on the experiences of providing mental health care in rural, urban and tribal areas in the country, evidence suggests that a recovered mentally ill person is a proof that effective treatment is available.

Repeated efforts to give the correct information can lead to change.

As an example, about 20 years back if someone got an attack of malaria fever, the shivering was thought to be due to possession of spirits. General public did not believe it was due to malaria parasite in the blood. However, now, most of the people know that malarial fever can be treated by chloroquine and they seek help for fever from the primary health centre or general practitioners. Continued efforts and willingness to hear their beliefs and be with them during their times of trouble will lead to changes of belief, their attitude to the illness and to give up the old practices and accept medical treatment.

CASE-RECORD

National Mental Health Programme

Name.....Clinic No.....

Age..... Yrs. Sex :.....Date : .....

Father's/Husband's Name:.....

Permanent Postal Address :.....

Mode of contact: Health worker / Other patient / self / Other agency

Main Complaints & Direction of illness :

Symptoms and Signs

- ☐ Unconsciousness
- ☐ Clouded Consciousness
- ☐ Injury/tongue bite
- ☐ Tonic/Clonic movement
- ☐ Incontinence
- ☐ Attack in sleep/when alone
- ☐ Delayed milestones
- ☐ Speech difficulty
- ☐ Physical handicaps
- ☐ Scholastic backwardness
- ☐ Limited social skills
- ☐ Fear/Anxiety
- ☐ Palpitation
- ☐ Giddiness
- ☐ Headache
- ☐ Tremors of hands
- ☐ Difficulty to concentrate
- ☐ Body aches/pains
- ☐ Weakness
- ☐ Sexual problems
- ☐ Excess activity
- ☐ Dull/withdrawn
- ☐ Excess/Ununderstandable speech
- ☐ Hallucination
- ☐ Elation/excess happiness
- ☐ Violence and aggression
- ☐ Anger/irritability
- ☐ Sadness
- ☐ Suicidal ideation/attempt
- ☐ Delusions (False believes)
- ☐ Disorientation
- ☐ Loss of memory/forgetfulness
- ☐ Sleep and appetite disturbance
- ☐ Self neglect
- ☐ Brief episodic abnormal behaviour
- ☐ Alcohol abuse
- ☐ Abuse of other drugs
- ☐ Repeated thoughts and actions

Frequency of Symptoms : **Episodic / continuous**

Family history : Mental illness/M.R./Epilepsy

Past history : Mental illness/Epilepsy

Associated events : Fever/Head injury/Alcohol use/Psychosocial/ Stress/Significant physical illness

Physical examination : Normal/Abnormal (Specify).....

Investigations : Normal/Abnormal (Specify).....

Diagnosis :

- ☐ FUNCTIONAL PSYCHOSIS (Schizophrenia/Mania/Depression/Acute Psychois)
- ☐ ORGANIC PSYCHOSIS (Acute/Chronic)
- ☐ EPILEPSY (Generalized/Focal/Febrile)
- ☐ MENTAL RETARDATION
- ☐ DRUG DEPENDENCE (Alcohol/Other drugs)
- ☐ NEUROSIS (Anxiety/Depression/Hysteria)
- ☐ OTHERS (Specify .....)

Treatment :

.....

.....

.....

Signature of Doctor

FOLLOW-UP RECORDS

Date	Clinical condition including side effects	Treatment	Follow-up

Time table for a short course in Mental Health for Medical Officers

Day	Forenoon	Afternoon
1	Introduction of participants and trainers. Introduction to training Programme.	Pre-training assessment with video cases / cases stories. Multiple choice Questions.
2	Magnitude of mental health problems in our country. Need to integrate mental health with general health services. Brain and Behaviour.	Mental illness : features, types, causes and treatment
3	General approach to psychiatric patients. History taking and mental state examination Role play exercise.	Discussion of features of different types of psychosis.
4	Working up of psychotic cases and discussion.	Discussion on organic psychoses.
5	Observation of ECT, working up of patients of psychoses and discussion.	Discussion (contd.)
6	Epilepsy: Types, causes and management.	PHC visit. Psychiatric clinic at PHC.
7	Neuroses: Features, causes and types. Management of Neuroses	Principles of counselling / Psychotherapy
8	Legal aspect of Psychiatry; Case work up and Discussion.	Mental Health education video.
9	Teaching health workers; Preparation and Practical demonstration exercise. Role-play.	Mental retardation and its management.
10	Visit to various wards. Visit to mental retardation clinic.	Visit to rehabilitation facility.
11	Childhood psychiatric disorders Psychopharmacology	Implementation of mental health programmes, discussion of problems.
12	Post-training assessment.	Review of the programme Valedictory function.

Flow chart for diagnosis and management of mental retardation

Presenting → **0- 6 years** | **7- 18 years** | **19 years and above**

0- 6 years

Prolonged labour, delayed birth cry, feeding problems, not able to smile at mother, not able to hold the neck, not crawling, not able to sit or stand, not walking, not able to speak, not able to feed by self, no toilet control, overactive, irritable, does not play with other children

↓

Physical examination to detect minor congenital abnormalities, hemiplegia, cranial nerve palsy, OR other CVS/RS/PA abnormalities.

Interventions

1. Educate the parents about the nature of the problem.
2. Listen to the reaction of the parents.
3. Clarify doubts if any
4. Early stimulation intervention - Start Sensory motor stimulation – Oil massage followed by hot water and touching, tickling, gentle bouncing, to and fro rocking movements, balloons, colorful toys, playing tunes, gentle clapping, talking to the child and building simple conversation around daily routines. Getting the child to experience different tastes and odors, prone positioning, supported sitting, walking, grasping reaching, holding and transferring
5. Social skills training- mother child games, imitation and showing body parts
6. Cognitive training – sorting, classifying, arranging and matching and concept of size, shape, time, distance and direction
7. Start Anti-convulsant if required
8. Link the family for support – ANMs, HWs, Anganawadi teacher, IED teacher or other agency
9. Review every month
10. Care for physical health problems
11. Certification for welfare benefits

7- 18 years

Not able to help self, poor in studies, detained in the same class because of poor performance. cannot read/write, poor memory, overactive, destructive behavior, dull and withdrawn, disinhibited behavior, not able to do simple calculation/shopping. Above problems have occurred on the back ground of delay in developmental milestones

↓

Physical examination and behavioral observation

Multi-focal congential abnormalities, hemiplegia, cranial nerve palsy, OR other CVS/RS abnormalities.

Interventions

1. Educate the parents about the nature of the problem.
2. Listen to the reaction of the parents.
3. Clarify doubts if any
4. Reading /writing skills through IED teacher
5. Vocational skills with help from parents/Volunteers / out reach workers
6. Involve self-help group members
7. Start anti-consultants for epilepsy if needed.
8. Encourage formation of self-help groups in the village with support from IED teacher, ANM, HW or out reach workers of other agencies
9. Review once in 2-3 months
10. Care for physical health problems.
11. Certification for welfare benefits

19 years and above

Cannot do simple calculation, needs help in self care activities, cannot follow simple instructions, does not know cooking, socially disinhibited behavior, irritable, odd behavior in presence of people, demanding and recent onset behavioral problems. The above difficulties have been present on the background of delayed, miles-stones after birth.

↓

Physical examination and behavioral observation

Multi-focal congential abnormalities, hemiplegia, cranial nerve palsy, OR other CVS/RS abnormalities.

Interventions

1. Educate the parents about the nature of the problem.
2. Listen to the reaction of the parents.
3. Clarify doubts if any
4. Vocational skills with help from parents/Volunteers / out reach workers
6. Involve self-help group members
7. Start anti-consultants for epilepsy if needed or start RSPN for psychosis or IMN for depression.
8. Encourage formation of self-help groups in the village with support from IED teacher, ANM, HW or out reach workers of other agencies
9. Review once in 2-3 months
10. Care for physical health problems.
11. Certification for welfare benefits

→ Refer to psychiatrist or discuss with program officer if there is no desirable change in the child after interventions

Flow chart for diagnosis and treatment of epilepsy

Presenting Complaints

Single seizure No drugs

Frequent episodes of fall and loss of consciousness, tonic clonic movements, injury, tongue bite, episodes of brief lasting abnormal behavior, sudden jerks, brief lasting vacant looking spells and fits following hot water bath

Early onset - Before 20 years of age

Late onset- After 20 years of age

Establish whether seizures –GTCS/ Focal- motor, sensory/sensory motor/ complex partial/reflex seizures/febrile/afebrile seizures

Refer for further evaluation to the specialist after starting PB 60mg or DPH 100mg to identify the cause

No neurological abnormalities on examination – start anti-convulsant medication

Neurological deficits +, Or fresh neuro deficits emerge during follow up- refer

Phenobarbitone dose : Maximum PB per day 180 mg

A. 0 - 3 years = 15 mg per day

4–10 years = 30 mg per day

11 years and above = 60 mg per day

*USEFUL IN GTCS, FOCAL SEIZURES AND ATYPICAL FEBRILE SEIZURES

Diphenyl-hydantoin: Maximum DPH per day 400mg

Children = 50 mg per day in divided doses

Adults = 100mg at bed time

*USEFUL IN GTCS, FOCAL AS WELL AS FOCAL-GEN

Carbamazepine: Maximum CBZ per day 800mg

Children = 100 mg per day in divided dosed

Adult = 200 mg per at bed time

*USEFUL IN GTCS, FOCAL AS WELL AS FOCAL-GEN

1. It is preferable to use one drug; reach the maximum dose depending upon the need.
2. Add another anti-convulsant only after reaching the maximum dose of drug.
3. Explore whether the person had genuine seizures before increasing medication.
4. Depression, psychosocial stress factors, discrimination at work place or home can result in psuedo-seizures. Reassurance and counseling is essential in such situations

Refer patients to the specialist in the following situations

1. **Late onset seizures**
2. **Sudden increase in frequency of seizures**
3. **Poor control of seizures despite use of two anti-convulsants in adequate dose.**
4. **Onset of fresh neurological deficits during follow up**
5. **Patients who have attempted suicide**
6. **Onset of acute excitement or acute withdrawal or depression**

Flow charts for Depressive disorders- Diagnosis and Treatment

Presenting Complaints

↓

Multiple aches and pains, vague bodily complaints, tingling/numbness, tiredness, lack of interest, feelings of sadness, inability to work, poor appetite, decreased sleep, loss of weight

↓

On examination

↓

Decreased PMA, slow speech, stooped posture, sad face, non-reactive mood, preoccupied with subjective ill health, tearful, hopelessness, worthlessness, and suicidal Ideas

↓

Above features started hours or days after life events like death, separation, failure in exams, loss of any other kind, demotion or any other traumatic event

↓

Adjustment Disorders/ Reactive Depression

↓

1. Physical examination and feedback
2. Reassurance
3. Link between stress and symptoms
4. Problem solving and coping strategies
5. Teach Distraction strategies
6. Encourage resumption of daily routine
7. Minor tranquilizers for a short period of time (Not more than 4-6 weeks) if necessary
8. Facilitate ventilation
9. Encourage the patients to focus on the life events or stress rather than on symptoms during follow up.
10. If no change after 4 weeks – consult PO

Above features developed with or without any life events or any other psycho-social stress but depressive features present for more than 15 days

↓

Major Depression

↓

1. Physical examination and feedback
2. Reassur and educate the patient and the family about the nature of the problem.
3. Start Antidepressants – IMN = 75 mg at bedtime for withdrawn depressives. OR
4. AMN = 75mg at bed time for agitated depressives. 3 and 4 for patients who are young and those without any cardiac problems.
5. Build up a therapeutic dose 100- 150 mg of IMN/AMN within few weeks.
6. Choose Fluoxetine 20 mg at breakfast for elderly depressives and young people with cardiac problems since IMN/AMN is not suitable.

Refer patients who have persistent suicidal ideas, depressive symptoms not improving despite adequate dose of anti-depressants, depression associated with complex psychosocial problems, depressive patients who refuse food and those who are in stupor.

Flow chart for diagnosis and treatment of substance use disorders

Presenting Complaints

- Physical complaints - upper gastrointestinal disturbances
- Accidents proneness - injuries
- Increased susceptibility to infection
- Sleep problems
- Psychotic symptoms
- Low mood
- Acute intoxication
- Aggression/violence - criminal charges
  Multiple bodily complaints
- Frequent requests for leave due to ill health

On examination

No physical health problems. Drinking pattern suggests abuse

→ Educate the individual about the ill effects of alcohol

Physical abnormalities +/- History suggestive of harmful use of alcohol

→ **Educate the individual about the ill effects of alcohol and treat physical health problems**

Physical abnormalities +/- History suggestive of dependence

→ **Educate about the ill effects of alcohol and suggest out-patient detoxification if there is no evidence of serious physical health problems**

→ **Refer**

1. **If the patient develops delirium tremens**
2. **Serious physical problems**
3. **Onset of neuro deficits**
4. **Relapse of drinking during detoxification**
5. **Not willing for OP detox**

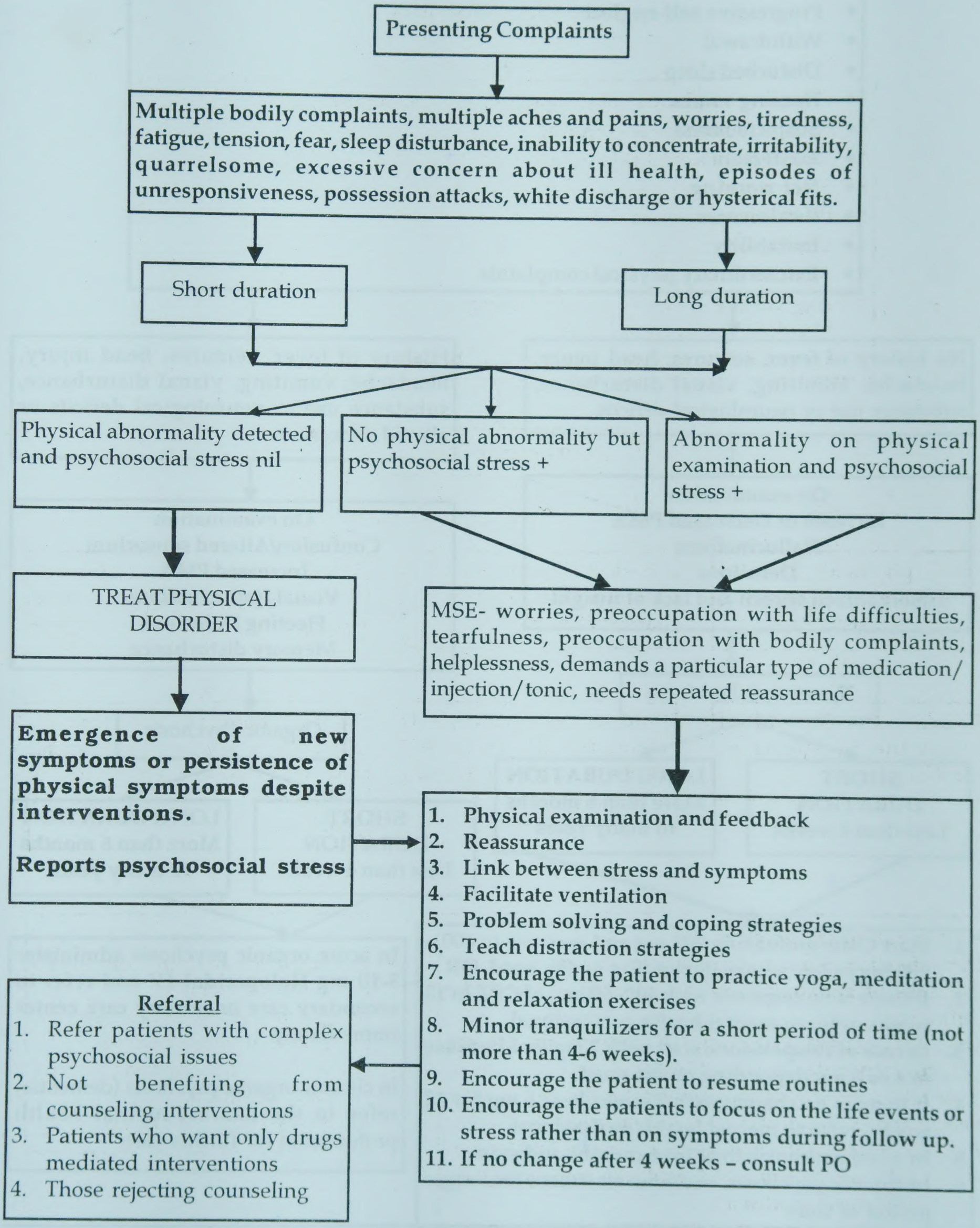
B. Out patient detoxification

Detoxification is a very simple intervention. Calculate the dose of benzodiazepines required by using the following.

1mg lorazepam OR 5mg Diazepam or 10 mg Chlordiazepoxide for every 30 ml of alcohol consumed.

If the total amount of alcohol consumed is 300 ml, then the amount of BZM required is 10mg of lorazepam OR 50 mg of diazepam or 100 mg of chlordiaepoxide. Start the total amount in divided doses on day 1 and gradually stop by day 10. Supplement plenty of vitamins

Flow chart for diagnosis and management of neurotic and stress related disorders in primary care



Flow Chart for Psychotic Disorders – Diagnosis and treatment

Presenting Complaints

- Progressive self-neglect
- Withdrawal
- Disturbed sleep
- Hearing voices
- Suspiciousness
- Excitement
- Not working
- Restlessness
- Irritability
- Extraordinary physical complaints

No history of fever, seizures, head injury, headache, vomiting, visual disturbance, substance use or neurological deficits

On examination
Increase or Decreased PMA
Hallucinations
Delusions
Disorganized speech and lack of insight

Functional Psychosis

SHORT DURATION
Less than 4 weeks

LONG DURATION
More than 6 months to many years

1. Start Chlorpromazine 200 mg and increase to 400 – 600 mg in few weeks depending on the need. OR
2. If there is no response with 400- 600mg of CPZ in 12 weeks, refer to mental health professional
3. In case of Resperidone start with 2 mg and increase to 4 or 6 mg depending on the need.
4. If there is no change with Resperidone 6 mg for 12 weeks, refer to mental health professional
5. In acute psychosis treat for 6 months and stop
6. In chronic psychosis, continue treatment for longer period of time

History of fever, seizures, head injury, headache, vomiting, visual disturbance, substance use or neurological deficits or altered sensorium

On examination
Confusion/Altered sensorium
Increased PMA
Visual Hallucinations
Fleeting Delusions
Memory disturbance

Organic Psychosis

SHORT DURATION
Less than 4 weeks

LONG DURATION
More than 6 months to many years

In acute organic psychosis administer 5-10 mg Haloperidol IV and refer to secondary care or tertiary care center immediately

In chronic organic psychosis (dementia) refer to the nearest mental health professional for further care